ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION

Product Name	:	Multimedia Projector
Model Number	:	PLC-WXU700
		LC-WB42N
FCC ID	:	WS309KY7AC00
Report Number	:	SZEE09030262698720-3
Date	:	May 05, 2009

Standards	Results
☒ FCC Part 15: 2008	PASS

Prepared for:

Dongguan Huaqiang SANYO Electronics Co., Ltd
HongYe Industry Area,Tang Xia Town,Dongguan ,Gangdong
TEL: 86-769-8775 3128
FAX: 86-769-8775 3123

Prepared by:

CENTRE TESTING INTERNATIONAL
Building C, Hongwei Industrial Zone, Baoan 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

TABLE OF CONTENTS

Description Page

N/A means not applicable.

1. CERTIFICATION INFORMATION

Applicant & Address:	Dongguan Huaqiang SANYO Electronics Co., Ltd HongYe Industry Area,Tang Xia Town,Dongguan ,Gangdong		
Manufacturer & Address:	Dongguan Huaqiang SANYO Electronics Co., Ltd HongYe Industry Area,Tang Xia Town,Dongguan ,Gangdong		
Type of Test:	FCC Part 15 (Certification)		
FCC ID:	WS309KY7AC00		
Equipment Under Test:	Multimedia Projector		
Test Model:	PLC-WXU700	**Trade Name:**	Sanyo
Additional Model:	LC-WB42N	**Trade Name:**	EIKI
Model Deviation:	The two models above are identical except the printings and trade marks for different buyers. The test model is PLC-WXU700, and all the test results are applicable to LC-WB42N.		
Serial Number:	N/A		
Date of test:	Mar. 26,2009 to May 05, 2009		
Condition of Test Sample:	Normal		

The above equipment was tested by Centre Testing International for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, Subpart B and the measurement procedure according to ANSI C63.4.
The test results of this report relate only to the tested sample identified in this report.

Prepared by : Lily Yan

Reviewed by : Christy Chen

Approved by : Jim Zhang
Manager

Date : May. 05, 2009

2. TEST SUMMARY

EMISSION -- FCC Part 15			
Clause	**Test Item**	**Rule**	**Result**
6	AC Power Line Conducted Emissions	15.207	**PASS**
7	Maximum Peak Conducted Output Power	15.247(b)(3)	**PASS**
8	Power Spectral Density	15.247(e)	**PASS**
9	6dB Spectrum Bandwidth	15.247(a)(2)	**PASS**
10	Radiated Emission	15.209	**PASS**
11	Band Edge Emission	15.247(d)	**PASS**

TABLE FOR TEST MODES				
Voltage:	AC120V/ 60Hz	**Mode:**	Max. Transmitting & normal	
Temperature:	24℃	**Humidity:**	53%	
Test Item		**Mode - Modulation**	**Data Rate (Mbps)**	**Channel**
AC Power Line Conducted Emissions		802.11b – DSSS	1	CH1
Maximum Peak Conducted Output Power Power Spectral Density 6dB Spectrum Bandwidth Radiated Emission		802.11b – DSSS	1/11	CH1 CH6 CH11
		802.11g – OFDM	6 /24 / 54	
		802.11n – OFDM(20MHz)	6.5 / 43.3 / 72.2	
		802.11n – OFDM(40MHz)	13.5 / 60 / 150	
Band Edge Emission		802.11b – DSSS	1/11	Ch: low Ch: high
		802.11g – OFDM	6 /24 / 54	
		802.11n – OFDM(20MHz)	6.5 / 43.3 / 72.2	
		802.11n – OFDM(40MHz)	13.5 / 60 / 150	

3. MEASUREMENT UNCERTAINTY

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement items	**Uncertainty**
AC Power Line Conducted Emissions	2.6 dB
Maximum Peak Conducted Output Power	0.5 dB
Power Spectral Density	0.5 dB
6dB Spectrum Bandwidth	--
Radiated Emissions / Band Edge Emissions	3.4 dB

4. PRODUCT INFORMATION

Items	Description
Rating	100-120V~ 4.0A 50/60Hz; 200-240V~ 2.0A 50/60Hz
Intentional Transceiver	Intentional Transceiver
Modulation	802.11b: DSSS with BPSK, QPSK, CCK 802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM 802.11n: OFDM with BPSK, QPSK, 16QAM, 64QAM
Data Rate	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 802.11n (20MHz): MCS0-7, up to 72Mbps 802.11n (40MHz): MCA0-7, up to 150Mbps Auto fallback
Frequency Range	2400 ~ 2483.5MHz
Channel Number	11
Transmit Power	802.11b: 18dBm 802.11g: 15dBm 802.11n: 15dBm
Antenna	Printed Antenna: Peak gain 2.5dBi, Average gain -1.91dBi

5. TEST EQUIPMENT

Equipment	Manufacturer	Model Number	Serial Number	Calibration Date
Shielding Room No. 1 —AC Power Line Conducted Emissions Measurement				
Receiver	R&S	ESCI	100435	01/29/2009
LISN	R&S	ENV216	100098	06/13/2008
3M Semi-anechoic Chamber — Radio Test Site				
Spectrum Analyzer	Agilent	E4443A	MY45300910	09/07/2008
Biconilog Antenna	A.H.System	SAS-521-2	487	06/05/2008
Horn Antenna	ETS-LINDGREN	3117	00057407	06/27/2008
Loop Antenna	ETS-LINDGREN	6502	00071730	09/22/2008
3M Chamber & Accessories	ETS-LINDG REN	FACT-3	N/A	05/11/2008

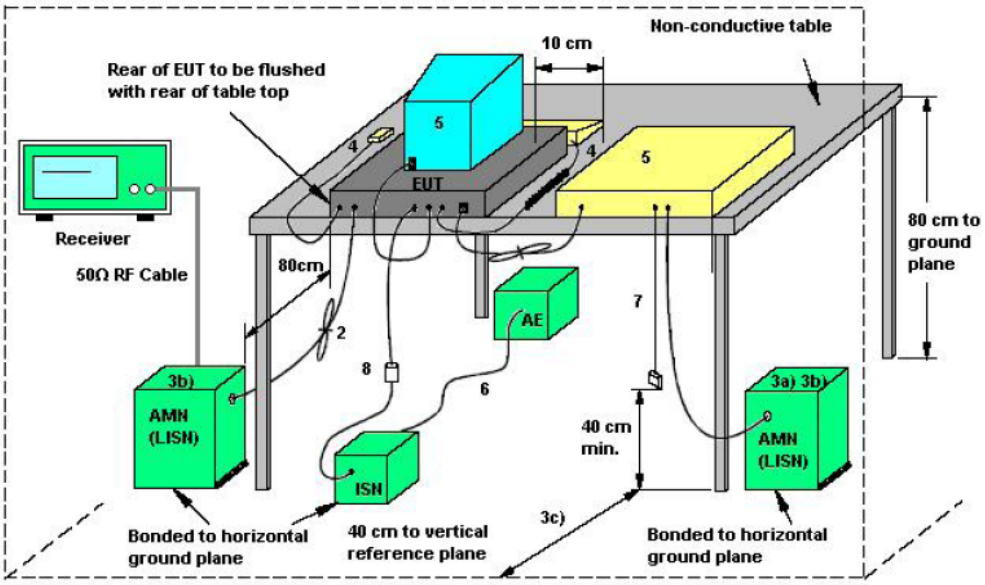
6. AC POWER LINE CONDUCTED EMISSIONS MEASUREMENT

6.1 LIMITS

Frequency (MHz)	Conducted Limit (dBuV) – Class B Digital Device	
	Q.P.	Average(dBuV)
0.150 – 0.5	66-56	56-46
0.5 – 5	56	46
5 - 30	60	50

Note: the tighter limit applies at the band edges.

6.2 BLOCK DIAGRAM OF TEST SETUP



6.3 TEST PROCEDURE

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room and connected to the main through Line Impedance Stability Network (LISN). This provided a 50ohm coupling impedance for the tested equipments.

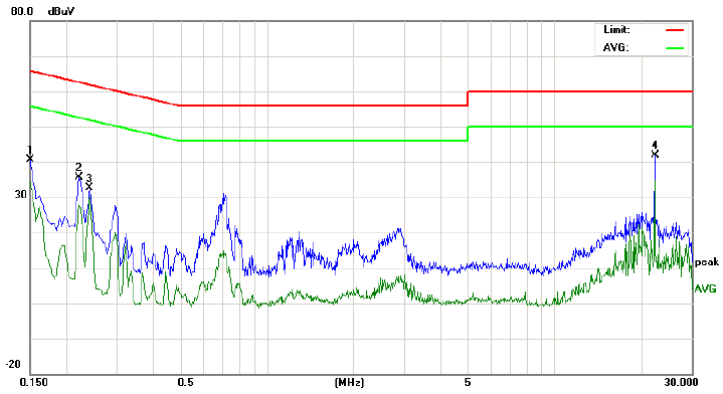
b. The bandwidth of the field strength meter (Receiver) was set at 9kHz in 150kHz ~ 30MHz.

c. The disturbance levels and the frequencies of at least two highest disturbances were recorded from each power line which comprises the EUT.

6.4 TEST RESULT

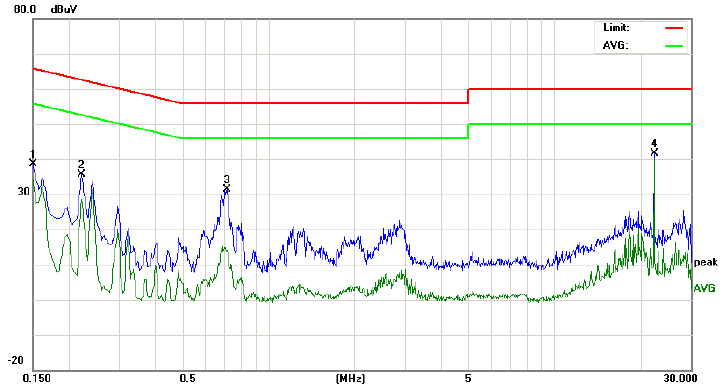
Test Results-L

No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F
1	0.1500	28.51	26.44	24.06	10.01	38.52	36.45	34.07	66.00	56.00	-29.55	-21.93	P
2	0.2220	25.73	23.92	17.64	9.95	35.68	33.87	27.59	62.74	52.74	-28.87	-25.15	P
3	0.7180	21.52	16.38	3.56	9.94	31.46	26.32	13.50	56.00	46.00	-29.68	-32.50	P
4	22.3820	31.80	31.18	29.77	9.85	41.65	41.03	39.62	60.00	50.00	-18.97	-10.38	P



Test Results-N

No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F
1	0.1500	28.51	26.44	24.06	10.01	38.52	36.45	34.07	66.00	56.00	-29.55	-21.93	P
2	0.2220	25.73	23.92	17.64	9.95	35.68	33.87	27.59	62.74	52.74	-28.87	-25.15	P
3	0.7180	21.52	16.38	3.56	9.94	31.46	26.32	13.50	56.00	46.00	-29.68	-32.50	P
4	22.3820	31.80	31.18	29.77	9.85	41.65	41.03	39.62	60.00	50.00	-18.97	-10.38	P

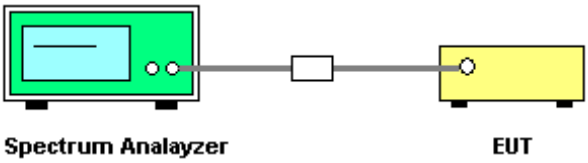


7. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

7.1 LIMITS

The limit for peak output power is 1 Watt (30dBm).

7.2 BLOCK DIAGRAM OF TEST SETUP



7.3 TEST PROCEDURE

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set spectrum analyzer's RBW and VBW to applicable value with Peak in Max Hold.
3. Record the channel power within 99% occupied bandwidth.

7.4 TEST RESULT

Measured Power= Reading Power + 10*log(1/x) + Cable Loss

Where, x means Duty Cycle measurement = T_{on} / (T_{on} + T_{off})=100%; Cable Loss = 0.9dB.

Mode - Modulation	Data Rate	Channel	Reading Power (dBm)	Measured Power (dBm)	Max. Limit (dBm)	Result (P/F)
802.11b – DSSS	1 Mbps	CH1	23.47	24.37	30	P
		CH6	22.64	23.54	30	P
		CH11	22.01	22.91	30	P
	11 Mbps	CH1	25.43	26.33	30	P
		CH6	23.72	24.62	30	P
		CH11	23.78	24.68	30	P
802.11g – OFDM	6 Mbps	CH1	23.22	24.12	30	P
		CH6	22.32	23.22	30	P
		CH11	21.66	22.56	30	P
	24 Mbps	CH1	22.06	22.96	30	P
		CH6	21.37	22.27	30	P
		CH11	20.68	21.58	30	P
	54 Mbps	CH1	19.37	20.27	30	P
		CH6	19.10	20.00	30	P
		CH11	18.53	19.43	30	P
802.11n – OFDM(20MHz)	6.5 Mbps	CH1	22.53	23.43	30	P
		CH6	22.44	23.34	30	P
		CH11	21.31	22.21	30	P
	43.3 Mbps	CH1	21.42	22.32	30	P
		CH6	21.30	22.20	30	P
		CH11	20.16	21.06	30	P
	72.2 Mbps	CH1	19.75	20.65	30	P
		CH6	19.40	20.30	30	P
		CH11	18.38	19.28	30	P
802.11n – OFDM(40MHz)	13.5 Mbps	CH1	22.75	23.65	30	P
		CH6	22.73	23.63	30	P
		CH11	21.66	22.56	30	P
	60 Mbps	CH1	23.83	24.73	30	P
		CH6	23.28	24.18	30	P
		CH11	22.41	23.31	30	P
	150 Mbps	CH1	20.06	20.96	30	P
		CH6	19.55	20.45	30	P
		CH11	18.51	19.41	30	P

7.5 GRAPH

See Annex 4.1 *MAXIMUM PEAK OUTPUT POWER Graphs*.

8. POWER SPECTRAL DENSITY (PSD) MEASUREMENT

8.1 LIMITS

The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3kHz band during any time interval of continuous transmission.

8.2 BLOCK DIAGRAM OF TEST SETUP

8.3 TEST PROCEDURE

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set RBW of spectrum analyzer to 3kHz and VBW to 30kHz with Peak in Max Hold.
3. Mark the frequency with max. peak power as the center of the display of the spectrum.
4. Set the span to 1.5MHz and record the maximum peak value.

8.4 TEST RESULT

Measured PSD = Reading PSD + 10*log(1/x) + Cable Loss

Where, x means Duty Cycle measurement = T_{on} / (T_{on} + T_{off})=100%; Cable Loss = 0.9dB.

Mode - Modulation	Data Rate	Channel	Reading PSD (dBm)	Measured PSD (dBm)	Max. Limit (dBm)	Result (P/F)
802.11b – DSSS	1 Mbps	CH1	1.64	2.54	8	P
		CH6	-9.92	-9.02	8	P
		CH11	1.22	2.12	8	P
	11 Mbps	CH1	-9.23	-8.33	8	P
		CH6	-10.25	-9.35	8	P
		CH11	-9.01	-8.11	8	P
802.11g – OFDM	6 Mbps	CH1	-13.05	-12.15	8	P
		CH6	-12.42	-11.52	8	P
		CH11	-13.79	-12.89	8	P
	24 Mbps	CH1	-14.34	-13.44	8	P
		CH6	-13.70	-12.8	8	P
		CH11	-14.58	-13.68	8	P
	54 Mbps	CH1	-17.01	-16.11	8	P
		CH6	-16.50	-15.6	8	P
		CH11	-16.54	-15.64	8	P
802.11n – OFDM(20MHz)	6.5 Mbps	CH1	-12.46	-11.56	8	P
		CH6	-12.59	-11.69	8	P
		CH11	-12.83	-11.93	8	P
	43.3 Mbps	CH1	-14.75	-13.85	8	P
		CH6	-14.40	-13.5	8	P
		CH11	-14.91	-14.01	8	P
	72.2 Mbps	CH1	-16.85	-15.95	8	P
		CH6	-17.25	-16.35	8	P
		CH11	-17.32	-16.42	8	P
802.11n – OFDM(40MHz)	13.5 Mbps	CH1	-13.81	-12.91	8	P
		CH6	-15.70	-14.8	8	P
		CH11	-18.31	-17.41	8	P
	60 Mbps	CH1	-18.54	-17.64	8	P
		CH6	-18.88	-17.98	8	P
		CH11	-19.76	-18.86	8	P
	150 Mbps	CH1	-21.15	-20.25	8	P
		CH6	-20.60	-19.7	8	P
		CH11	-21.33	-20.43	8	P

8.5 GRAPH

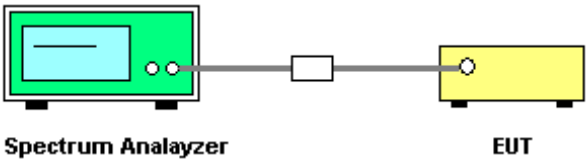
See Annex 4.2 *POWER SPECTRAL DENSITY (PSD) Graphs*.

9. 6DB SPECTRUM BANDWIDTH MEASUREMENT

9.1 LIMITS

The minimum 6 dB bandwidth shall be at least 500 kHz.

9.2 BLOCK DIAGRAM OF TEST SETUP



9.3 TEST PROCEDURE

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set spectrum analyzer's RBW and VBW to applicable value with Peak in Max Hold.
3. Measured the spectrum width with power higher than 6dB below carrier.

9.4 TEST RESULT

Mode - Modulation	Data Rate	Channel	6 dB BW (MHz)	99% OBW (MHz)	Min. Limit (kHz)	Result (P/F)
802.11b-DSSS	1 Mbps	CH1	10.24	15.30	500	P
		CH6	10.18	14.74	500	P
		CH11	10.16	14.54	500	P
	11 Mbps	CH1	9.80	15.22	500	P
		CH6	10.62	14.56	500	P
		CH11	8.56	14.42	500	P
802.11g – OFDM	6 Mbps	CH1	16.52	16.32	500	P
		CH6	15.38	16.30	500	P
		CH11	16.12	16.28	500	P
	24 Mbps	CH1	15.84	16.32	500	P
		CH6	14.66	16.32	500	P
		CH11	15.24	16.32	500	P
	54 Mbps	CH1	14.94	16.34	500	P
		CH6	14.02	16.32	500	P
		CH11	13.72	16.32	500	P
802.11n – OFDM(20MHz)	6.5 Mbps	CH1	9.08	17.44	500	P
		CH6	14.42	17.40	500	P
		CH11	15.04	17.36	500	P
	43.3 Mbps	CH1	14.36	17.46	500	P
		CH6	14.74	17.42	500	P
		CH11	14.68	17.42	500	P
	72.2 Mbps	CH1	16.24	17.50	500	P
		CH6	14.02	17.38	500	P
		CH11	13.68	17.38	500	P
802.11n – OFDM(40MHz)	13.5 Mbps	CH1	33.44	35.52	500	P
		CH6	31.32	35.40	500	P
		CH11	30.64	35.32	500	P
	60 Mbps	CH1	30.88	35.60	500	P
		CH6	30.68	35.44	500	P
		CH11	30.04	35.36	500	P
	150 Mbps	CH1	34.14	35.60	500	P
		CH6	29.48	35.44	500	P
		CH11	28.80	35.36	500	P

9.5 GRAPH

See Annex 4.3 *6DB SPECTRUM BANDWIDTH Graphs*.

10. RADIATED EMISSIONS EMISSIONS MEASUREMENT

10.1 LIMITS

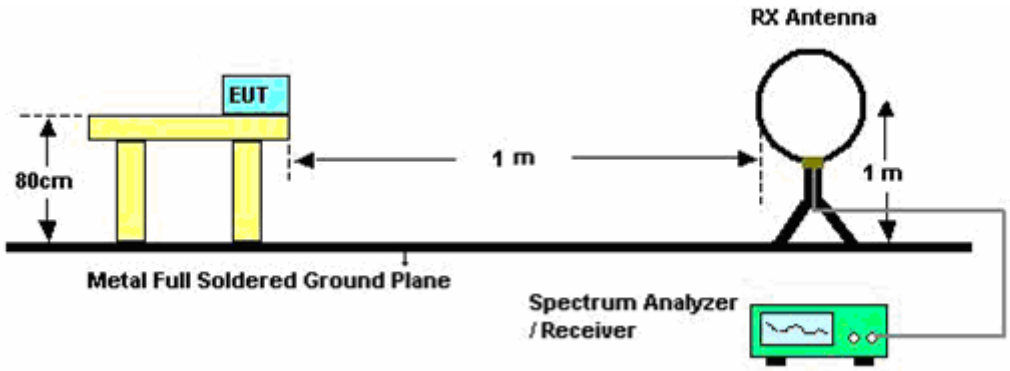
Rule: FCC Part15.209 -- The field strength of any emissions, which appear outside of operating frequency band and restricted band specified on 15.205(a), shall not exceed the general radiated emission limits as below.

Frequency (MHz)	Field strength (μV/m)	Distance (m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

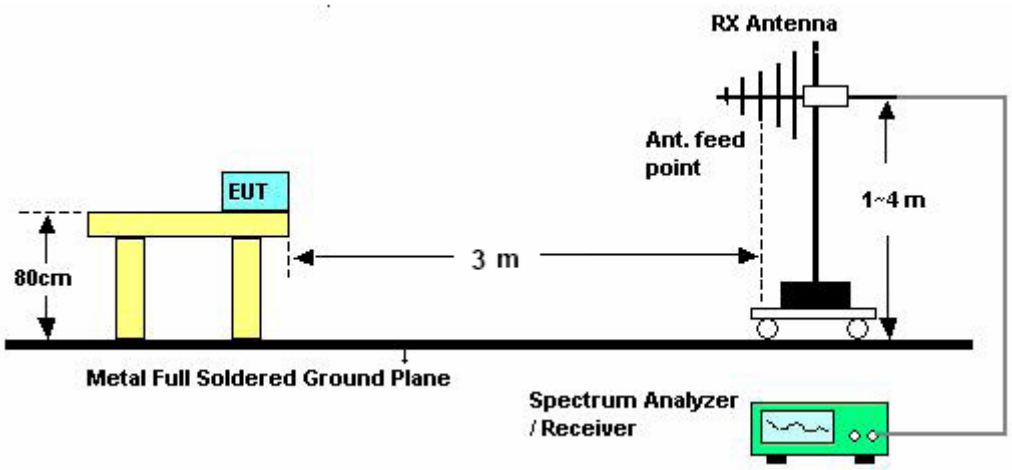
Note: the tighter limit applies at the band edges.

10.2 BLOCK DIAGRAM OF TEST SETUP

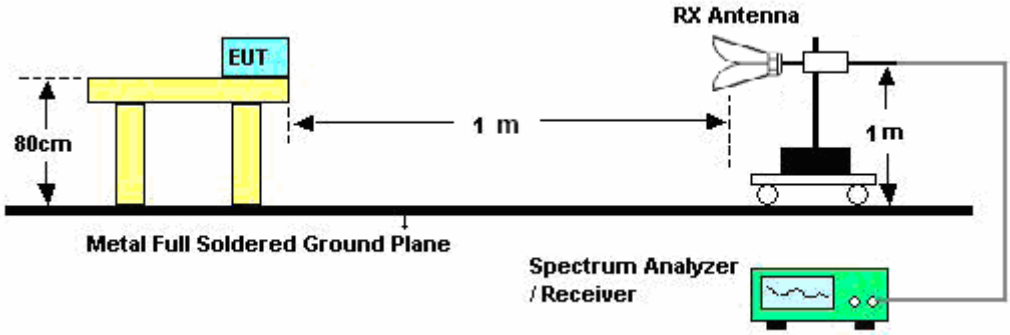
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30 - 1000MHz



For radiated emissions from 1GHz to 24GHz



10.3 TEST PROCEDURE

1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise,

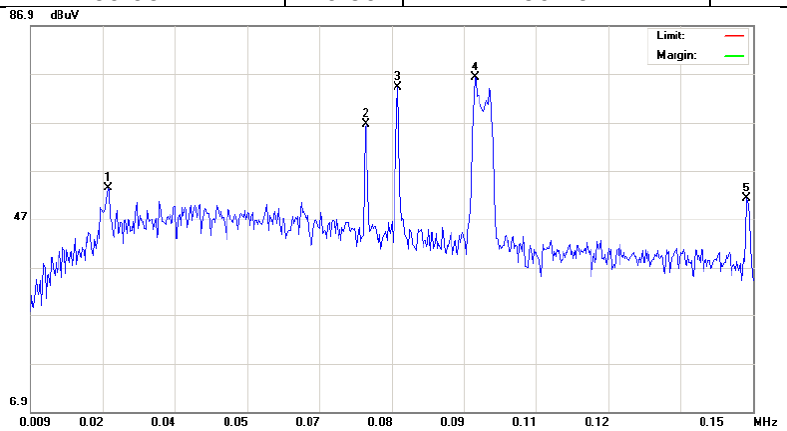
the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

10.4 TEST RESULT

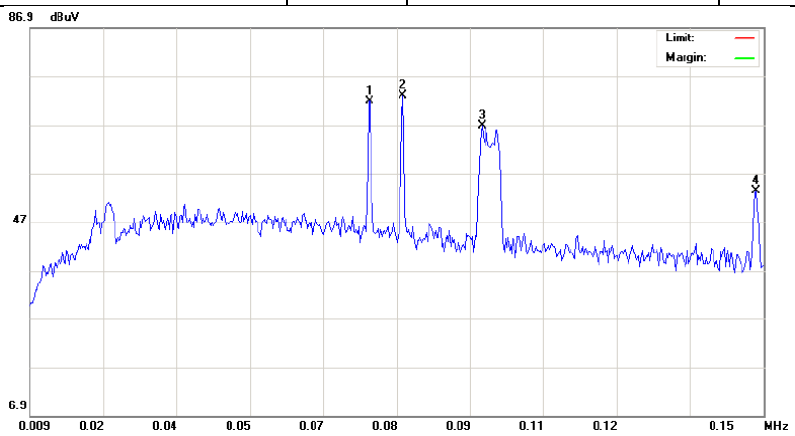
Note: Limit dBμV/m @1m = Limit dBμV/m @300m+ 90
Limit dBμV/m @1m = Limit dBμV/m @30m + 50
Limit dBμV/m @1m = Limit dBμV/m @3m +10

10.4.1 Results of Radiated Emissions (9kHz~150kHz)

Test Results-H (Measurement Distance: 1m)					
Frequency (kHz)	Reading Level - peak (dBμV/m)	Factor (dB)	Measurement - peak (dBμV/m)	Limit - QP (dBμV/m)	Result (P/F)
24.0	36.06	13.84	49.90	130.00	P
74.5	56.85	11.05	67.90	120.16	P
80.7	62.78	11.03	73.81	119.47	P
95.7	62.82	11.02	73.84	117.99	P
148.8	39.93	10.80	50.73	114.15	P

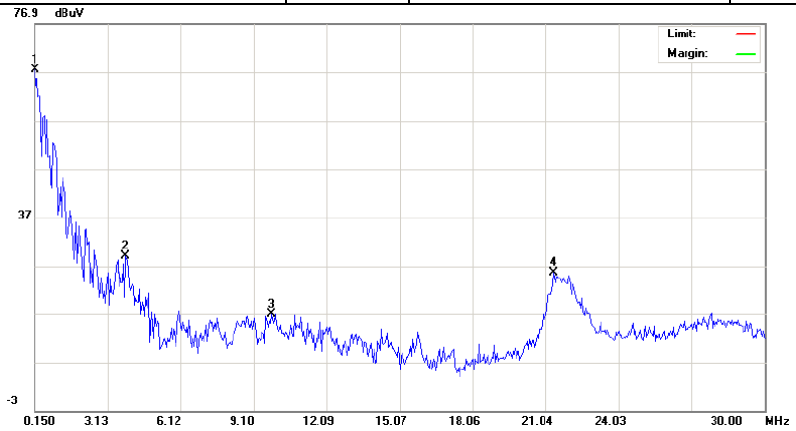


Test Results-V (Measurement Distance: 1m)					
Frequency (kHz)	Reading Level - peak (dBμV/m)	Factor (dB)	Measurement - peak (dBμV/m)	Limit - QP (dBμV/m)	Result (P/F)
74.3	57.87	11.05	68.92	120.18	P
80.7	59.92	11.03	70.95	119.47	P
95.9	51.12	11.01	62.13	117.97	P
148.6	40.46	10.81	51.27	114.16	P



10.4.2 Results of Radiated Emissions (150kHz~30MHz)

Test Results-H (Measurement Distance: 1m)					
Frequency (kHz)	Reading Level - peak (dBμV/m)	Factor (dB)	Measurement - peak (dBμV/m)	Limit - QP (dBμV/m)	Result (P/F)
150.0	55.60	10.80	67.32	114.08	P
3 881.3	18.43	1.11	28.98	79.54	P
9 851.3	8.48	0.25	16.89	79.54	P
21 393.3	21.59	-0.87	25.69	79.54	P

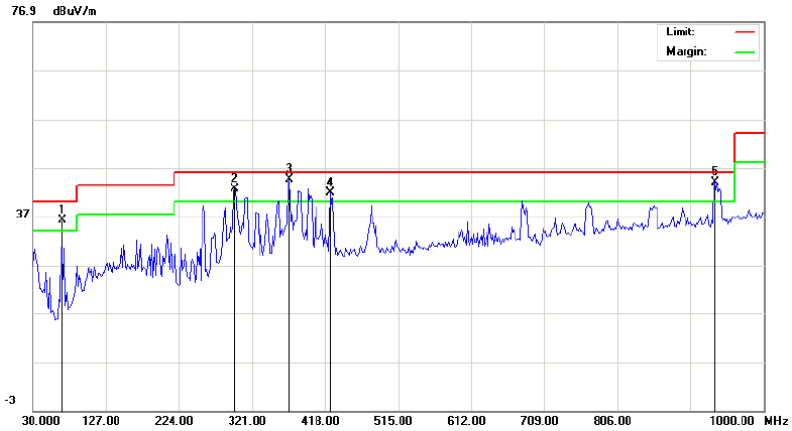


Test Results-V (Measurement Distance: 1m)					
Frequency (kHz)	Reading Level - peak (dBμV/m)	Factor (dB)	Measurement - peak (dBμV/m)	Limit - QP (dBμV/m)	Result (P/F)
150.0	48.57	10.80	59.37	114.08	P
22 239.0	18.79	-0.08	18.71	79.54	P
28 159.3	20.58	-1.62	18.96	79.54	P

10.4.3. Results of Radiated Emissions (30MHz~1GHz)

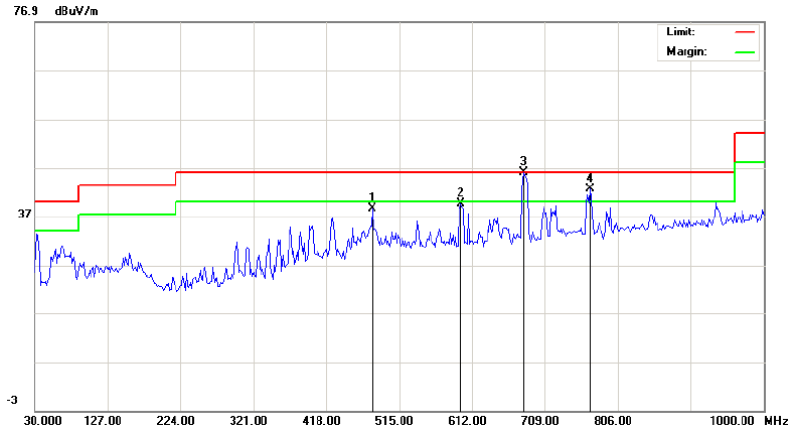
Test Results - H (Measurement Distance: 3m)

No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV/m)			Limit (dBuV/m)		Margin (dB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F
1	68.8000	28.81	27.14		7.46	36.27	34.60		40.00		-5.40		P
2	298.3667	26.85	24.05		15.85	42.70	39.90		46.00		-6.10		P
3	371.1167	27.05	22.50		17.64	44.69	40.14		46.00		-5.86		P
4	424.4667	22.29	17.13		19.48	41.77	36.61		46.00		-9.39		P
5	935.3333	17.28	11.76		26.78	44.06	38.54		46.00		-7.46		P



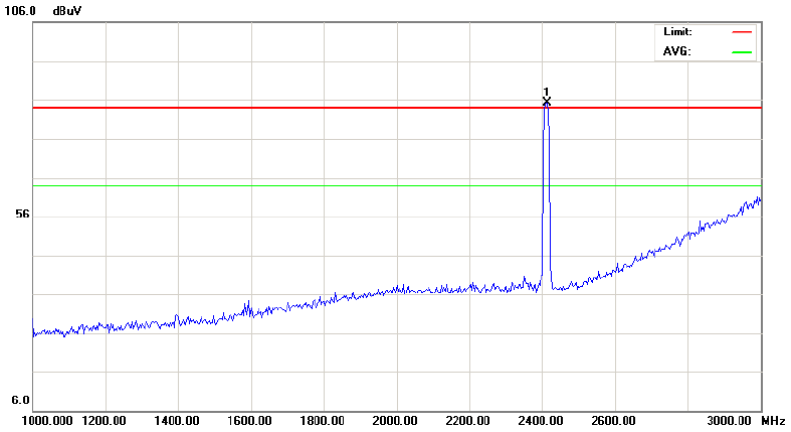
Test Results - V (Measurement Distance: 3m)

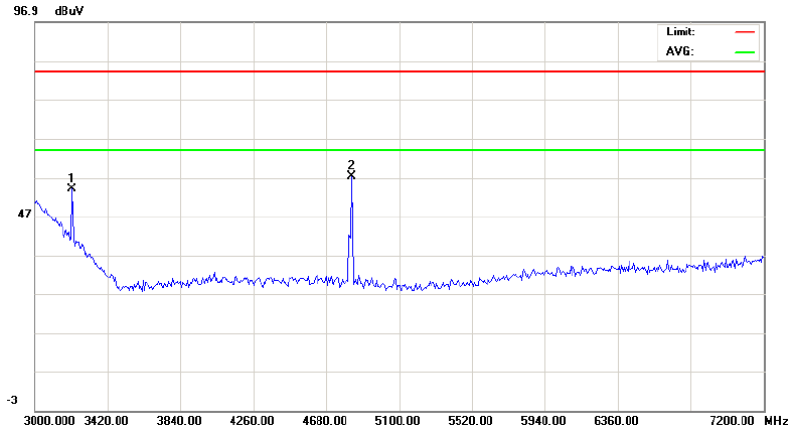
No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV/m)			Limit (dBuV/m)		Margin (dB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F
1	479.4333	18.49	16.48		20.02	38.51	36.50		46.00		-9.50		P
2	597.4500	16.90	12.79		22.79	39.69	35.58		46.00		-10.42		P
3	681.5167	22.32	20.91		23.64	45.96	44.55		46.00		-1.45		P
4	768.8167	17.89	15.06		24.80	42.69	39.86		46.00		-6.14		P

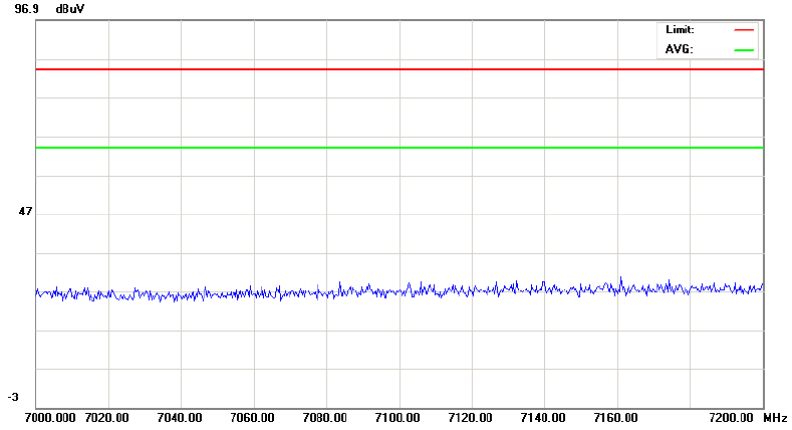


10.4.4. Results for Radiated Emissions (above 1GHz)

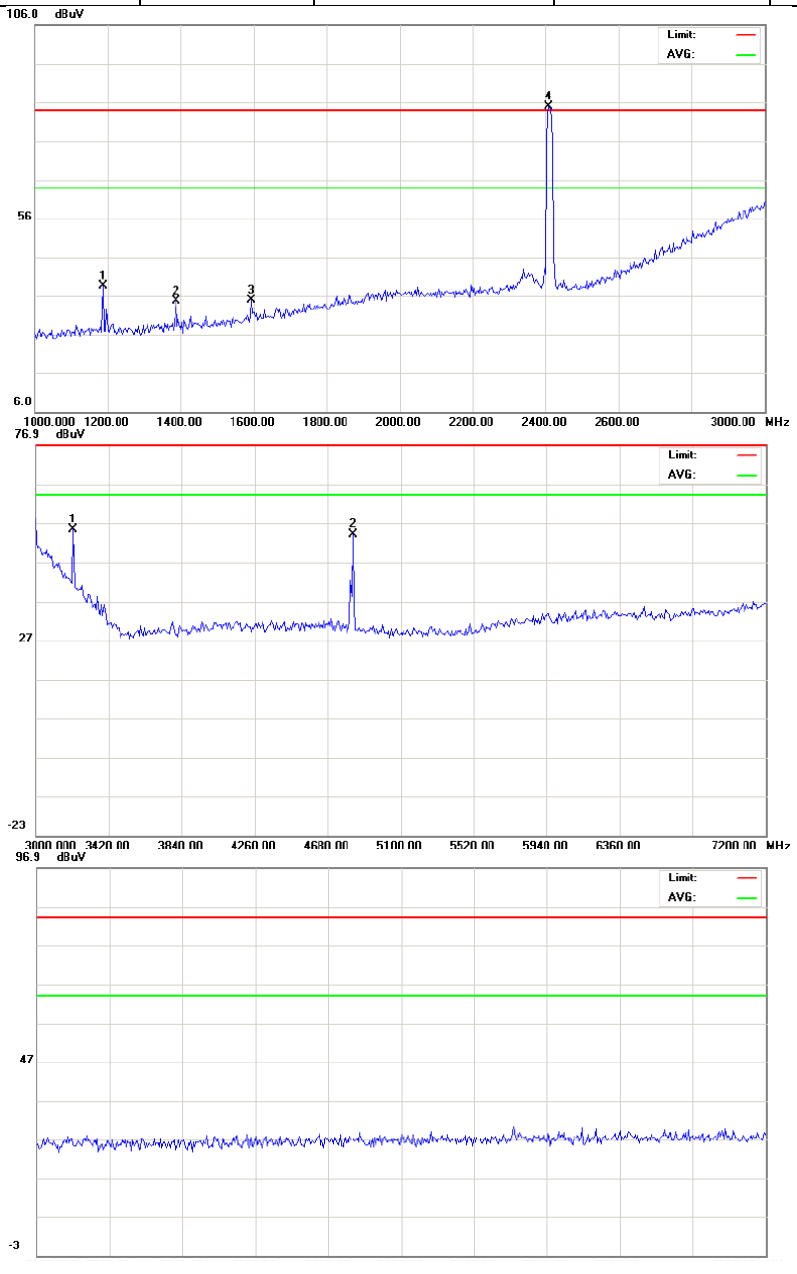
Test Results - H (Measurement Distance: 1m)						
Frequency (MHz)	Reading Level _ Peak (dBμV/m)	Factor (dB)	Measurement (dBμV/m)	Limit @1m _ AVG (dBμV/m)	Margin (dB)	Result (P/F)
2413.333	77.41	7.61	85.02	--	--	--
3217.000	34.45	19.61	54.06	64.00	-9.94	P
4827.000	46.33	10.97	57.30	-26.70	-6.70	P







Test Results - V (Measurement Distance: 1m)						
Frequency (MHz)	Reading Level _ Peak (dBμV/m)	Factor (dB)	Measurement (dBμV/m)	Limit @1m _ AVG (dBμV/m)	Margin (dB)	Result (P/F)
1186.667	41.68	-3.02	38.66	64.00	-25.34	P
1386.667	36.48	-1.74	34.74	64.00	-29.26	P
1593.333	34.36	0.43	34.79	64.00	-29.21	P
2413.333	77.17	7.60	84.77	--	--	--
3217.000	35.59	19.61	55.20	64.00	-8.80	P
4827.000	43.02	10.97	53.99	64.00	-10.01	P



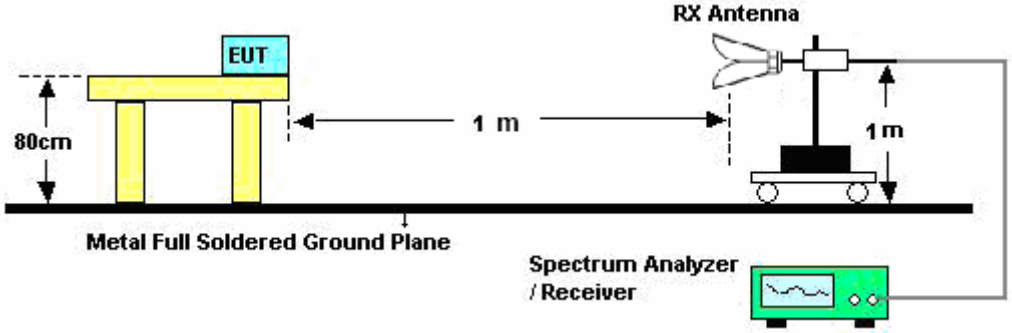
11. BAND EDGE EMISSIONS MEASUREMENT

11.1 LIMITS

Frequency (MHz)	Field strength (dBμV/m)	Distance (m)
2400 & 2483.5 (Above 960)	64	3

Note: the tighter limit applies at the band edges.

11.2 BLOCK DIAGRAM OF TEST SETUP



11.3 TEST PROCEDURE

The test procedure is the same as section 10.3.

11.4 TEST RESULT

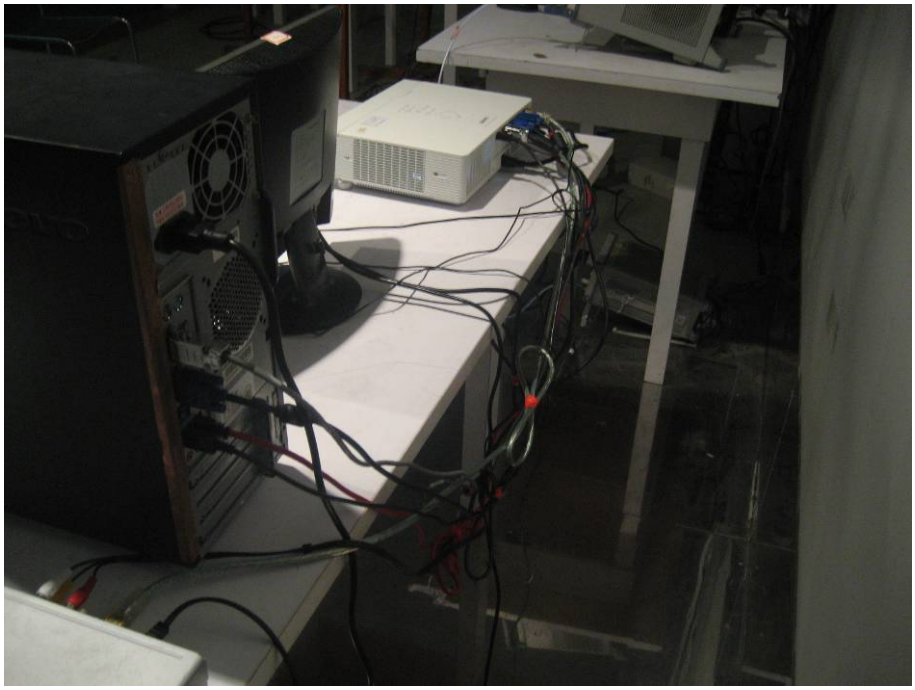
For calculate easily, the factor seems to be 7.70 at 2.4GHz and 2.4835GHz at measurement distance of 1m.

Mode Modulation	Data Rate	Measurement (dBμV/m)								Limit	Result
	Mbps	Ch: Low 2.4GHz				Ch: High 2.4835GHz				(dBμV/m)	(P/F)
		H		V		H		V		AVG	
		peak	AVG	peak	AVG	peak	AVG	peak	AVG		
802.11b DSSS	1	48.69	--	53.84	--	46.04	--	46.63	--	64	P
	11	49.21	--	54.07	--	45.12	--	46.64	--	64	P
802.11g OFDM	6	57.81	--	69.13	62.78	44.97	--	46.27	--	64	P
	24	57.26	--	61.91	54.03	45.57	--	45.11	--	64	P
	54	50.85	--	56.47	--	46.53	--	44.87	--	64	P
802.11n OFDM (20MHz)	6.5	58.82	--	66.66	60.49	45.66	--	46.82	--	64	P
	43.3	52.87	--	61.95	53.20	46.26	--	34.94	--	64	P
	72.2	48.89	--	53.15	--	46.07	--	45.33	--	64	P
802.11n OFDM (40MHz)	13.5	56.09	--	63.46	57.32	48.25	--	53.14	--	64	P
	60	50.80	--	58.63	--	47.77	--	50.76	--	64	P
	150	50.31	--	55.76	--	45.95	--	49.25	--	64	P

11.5 GRAPH

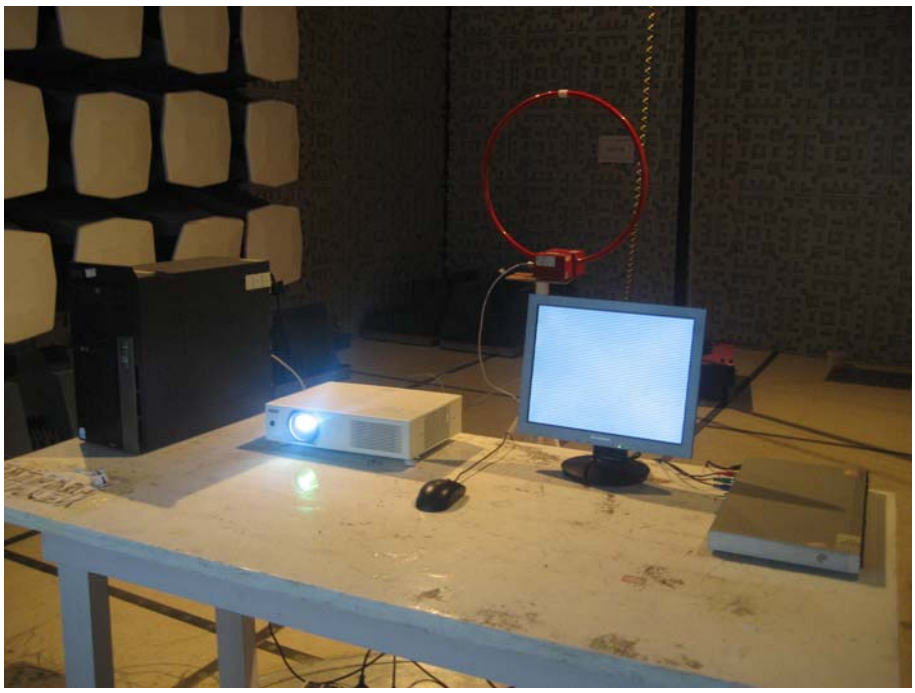
See Annex 4.4 *BAND EDGE Graphs*

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

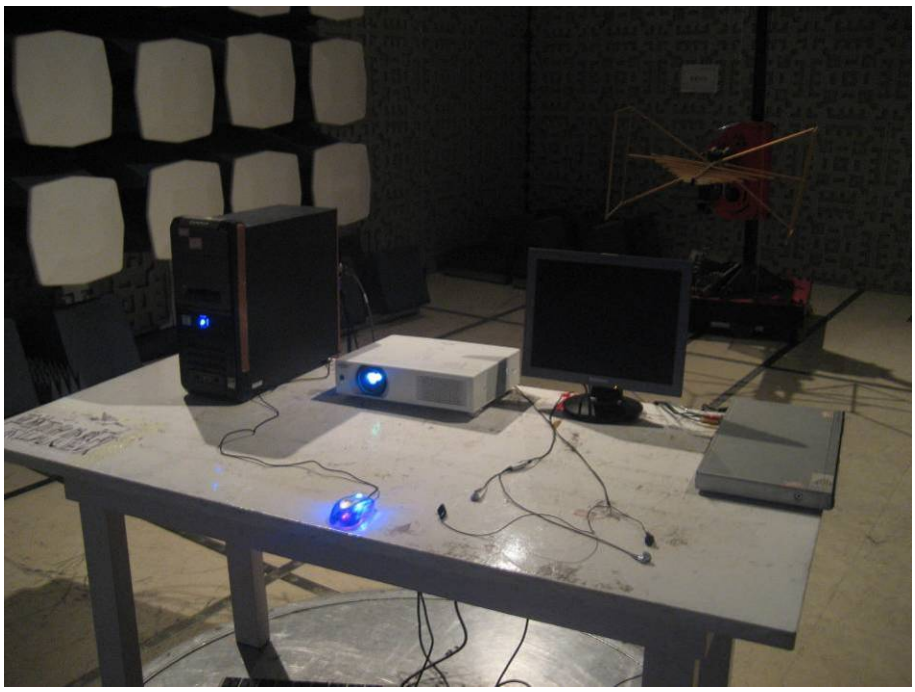


TEST SETUP OF CONDUCTED EMISSION-1

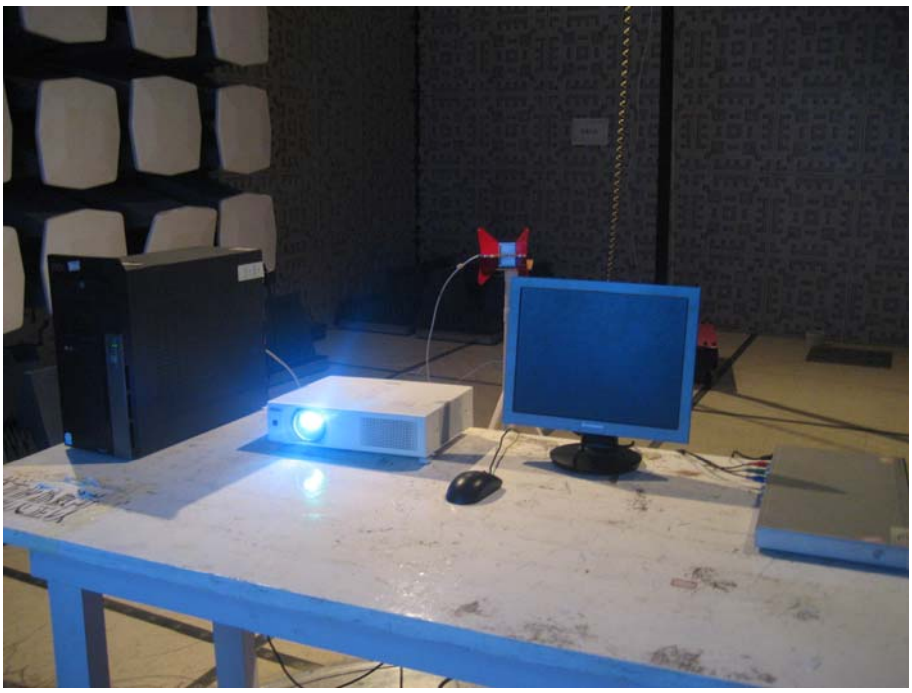
TEST SETUP OF CONDUCTED EMISSION-2



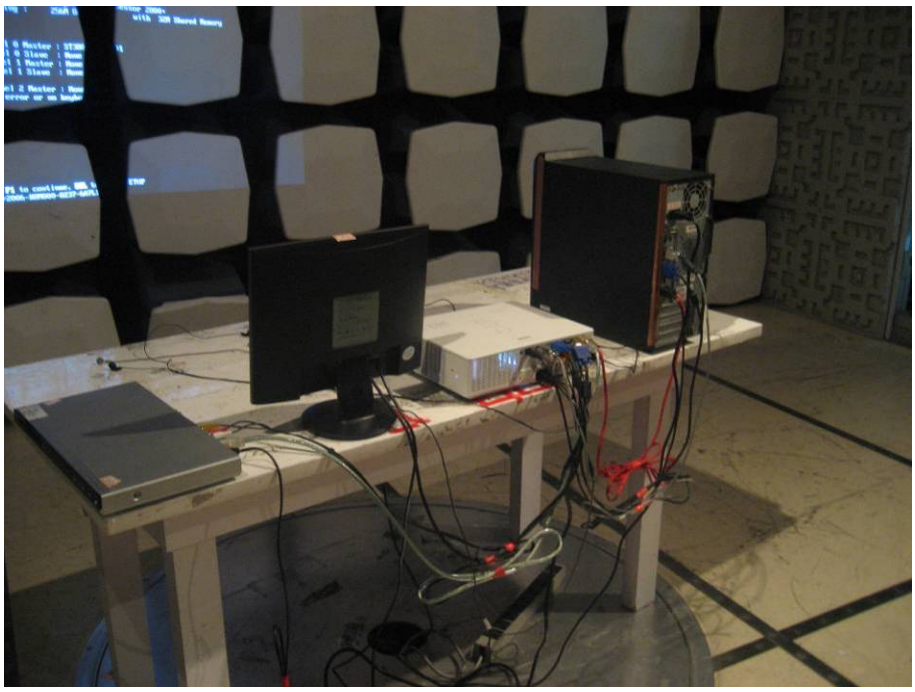
TEST SETUP OF RADIATED EMISSION (9kHz-30MHz)



TEST SETUP OF RADIATED EMISSION (30MHz-1GHz)



TEST SETUP OF RADIATED EMISSION (above 1GHz)

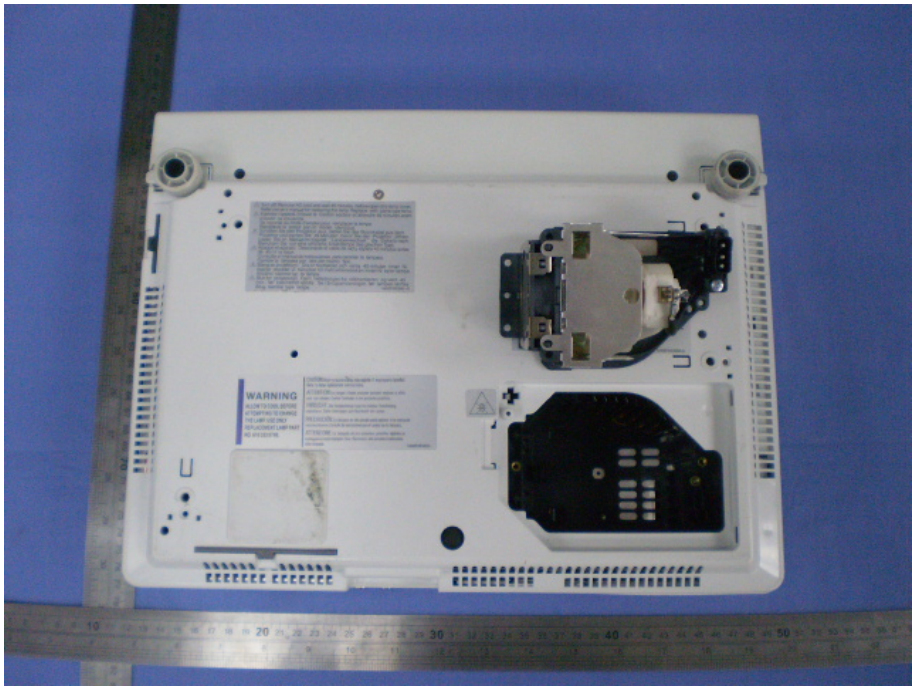


TEST SETUP OF RADIATED EMISSION - BACK VIEW

APPENDIX 2 EXTERNAL PHOTOGRAPHS OF EUT

View of EUT-1

View of EUT-2



View of EUT-3

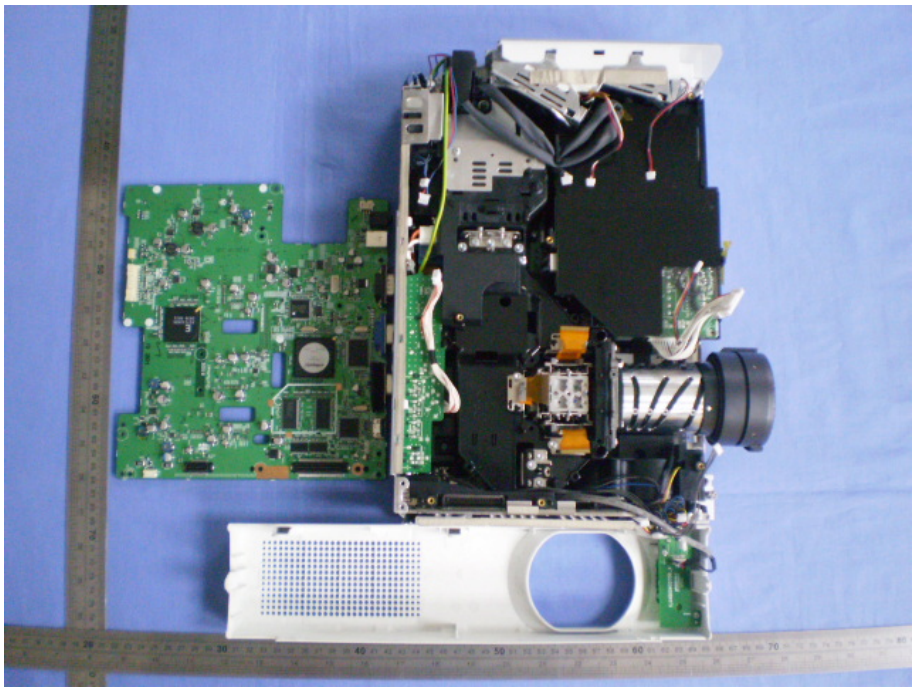
View of EUT-4

View of EUT-5

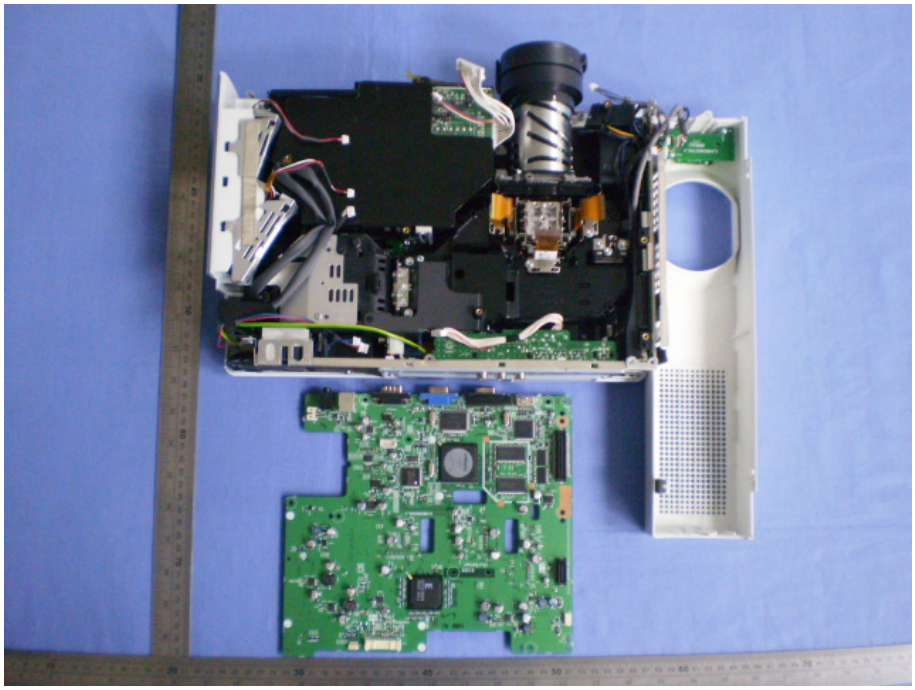
View of EUT-6

APPENDIX 3 INTERNAL PHOTOGRAPHS OF EUT

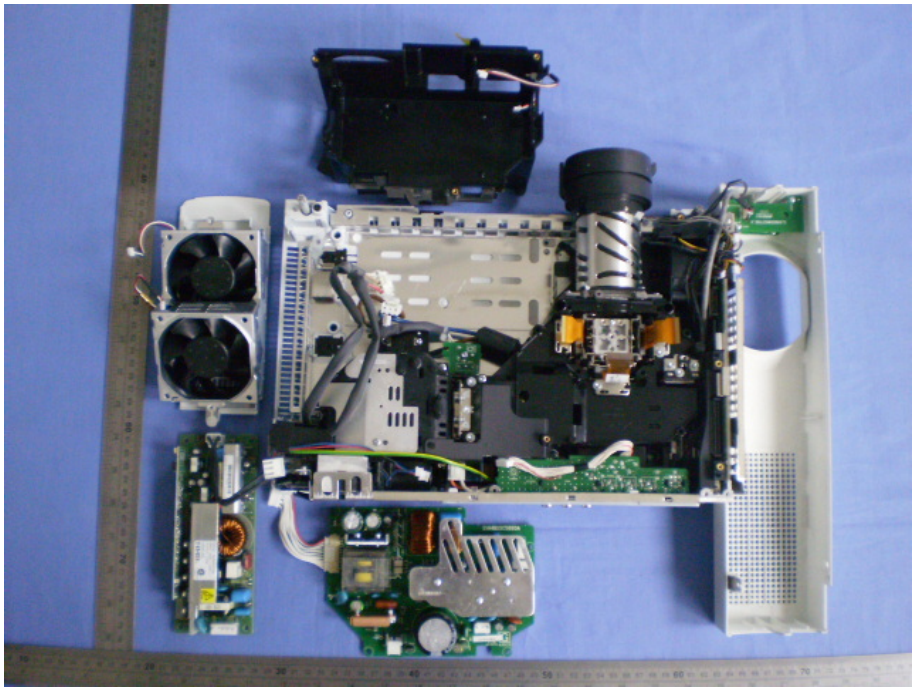
Internal View-1



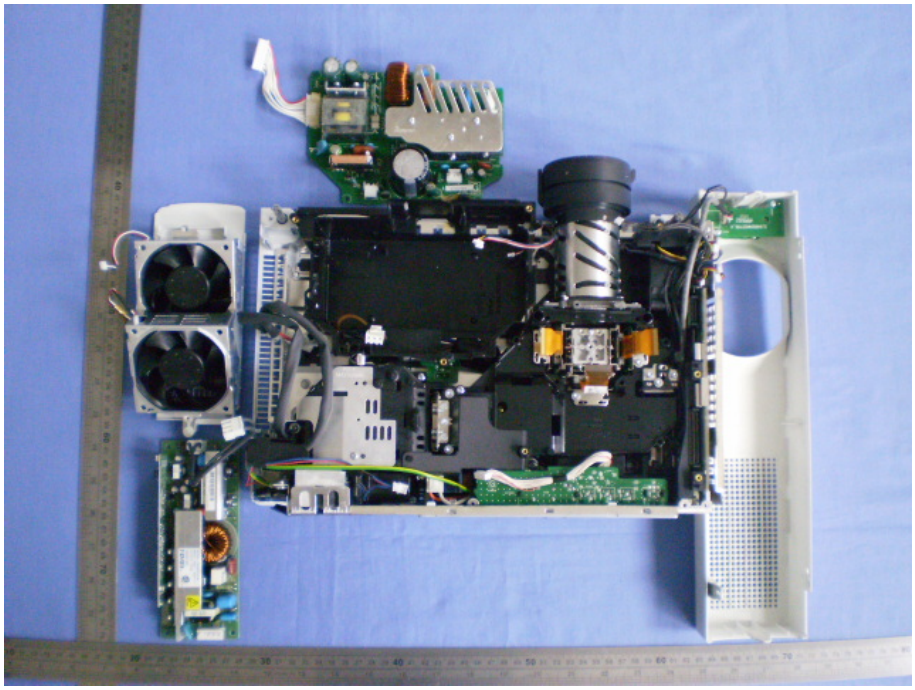
Internal View-2



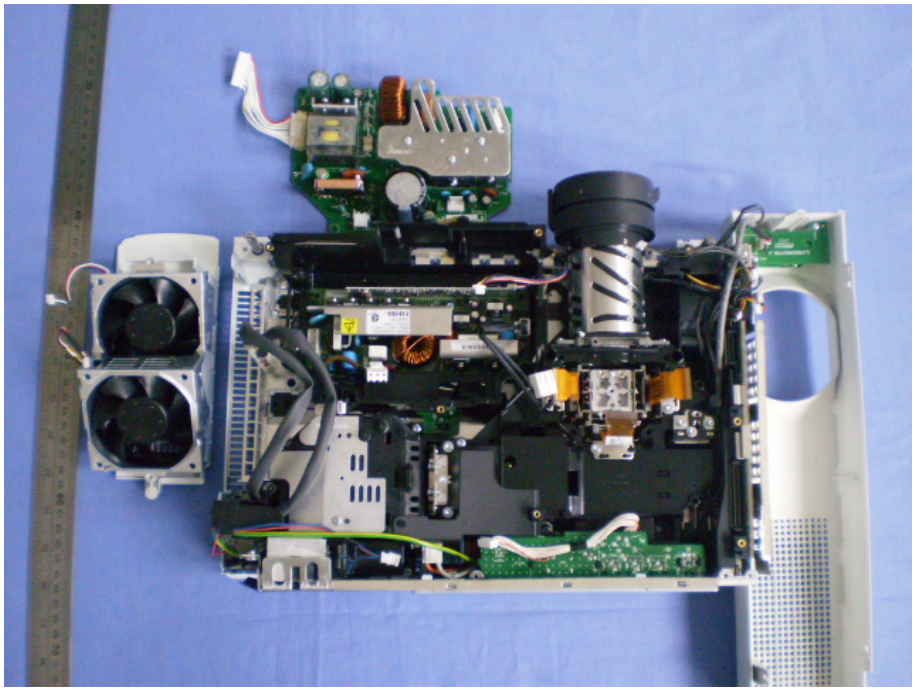
Internal View-3



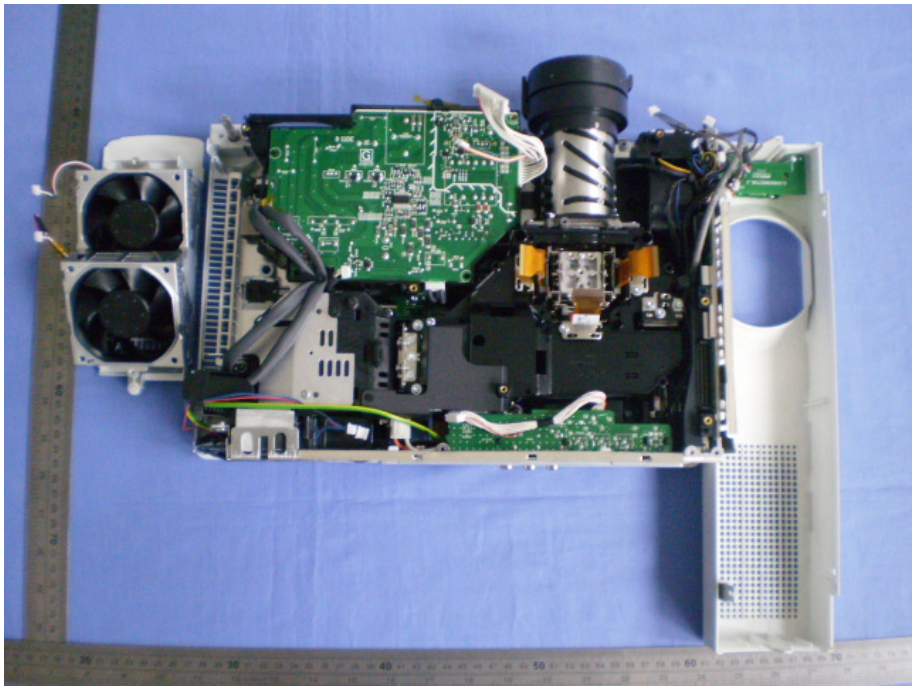
Internal View-4



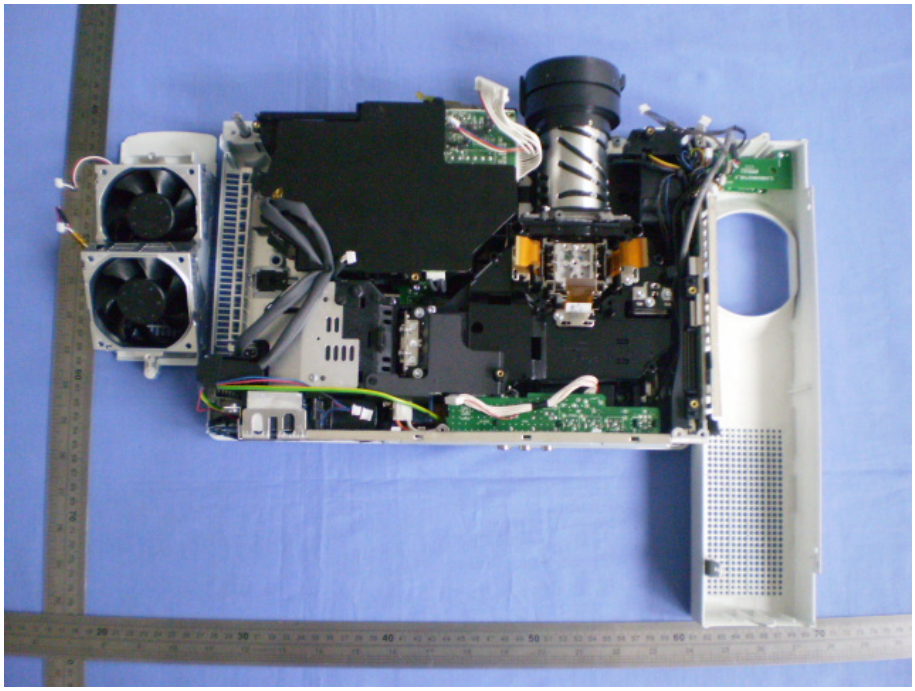
Internal View-5



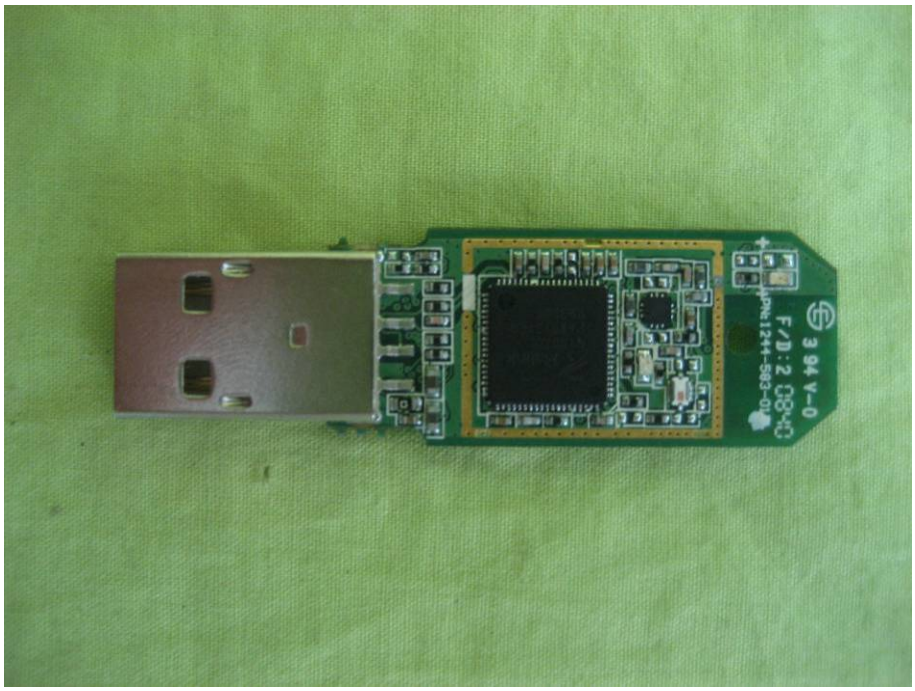
Internal View-6



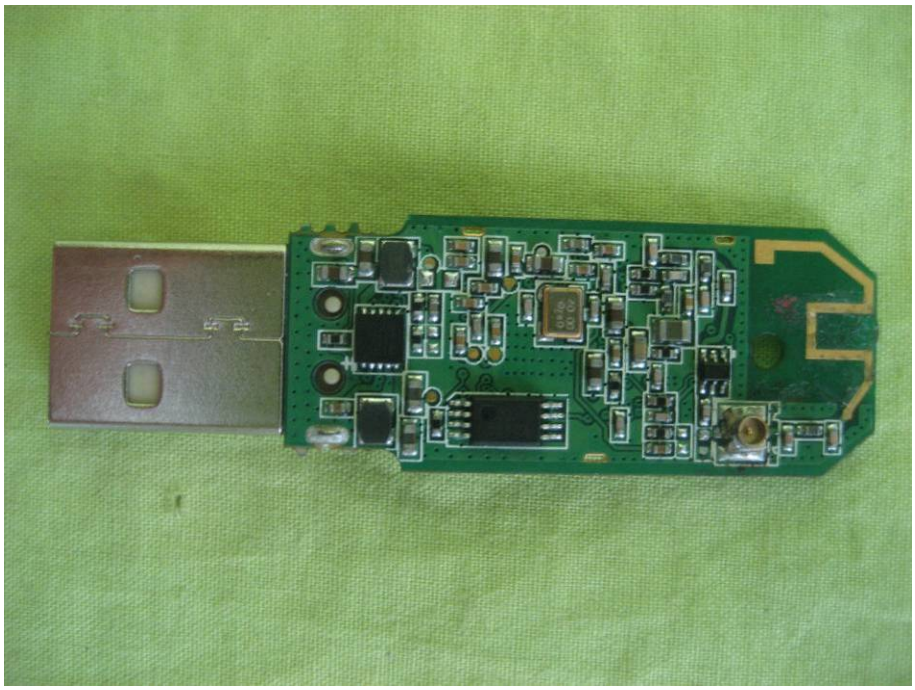
Internal View-7



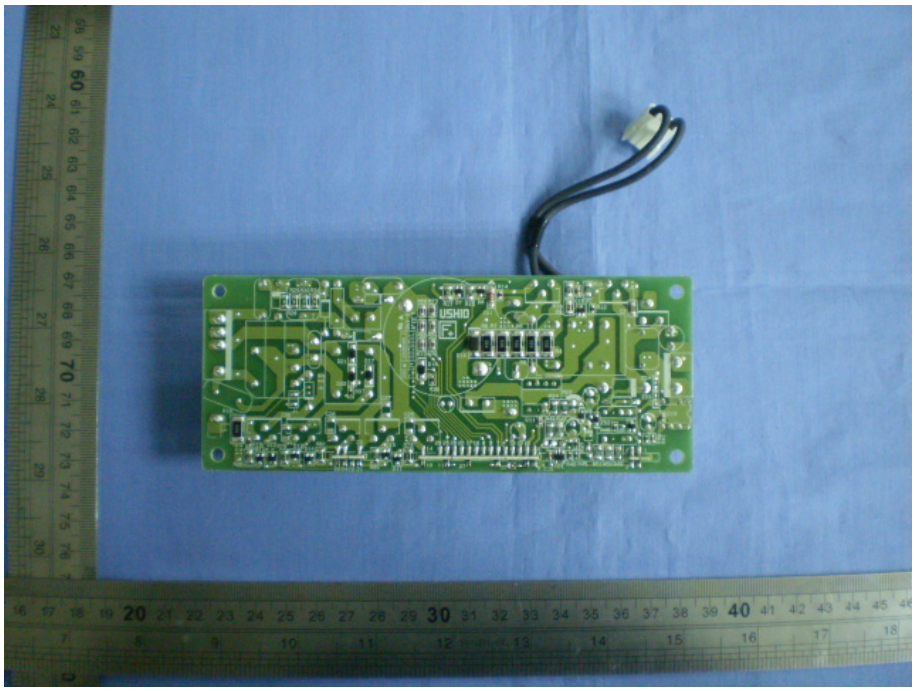
Internal View-8



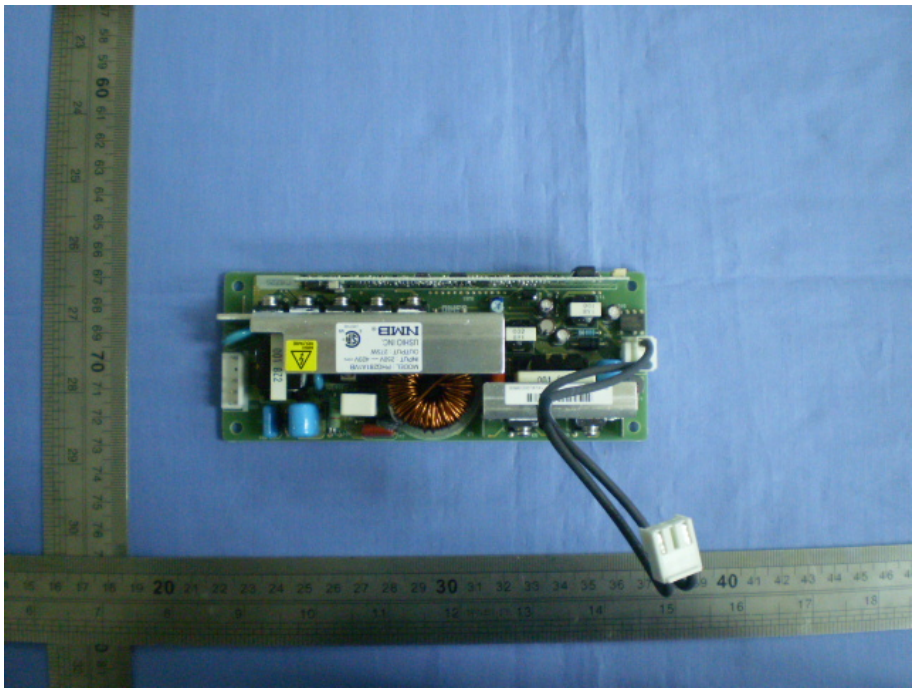
View of PCB 1-1



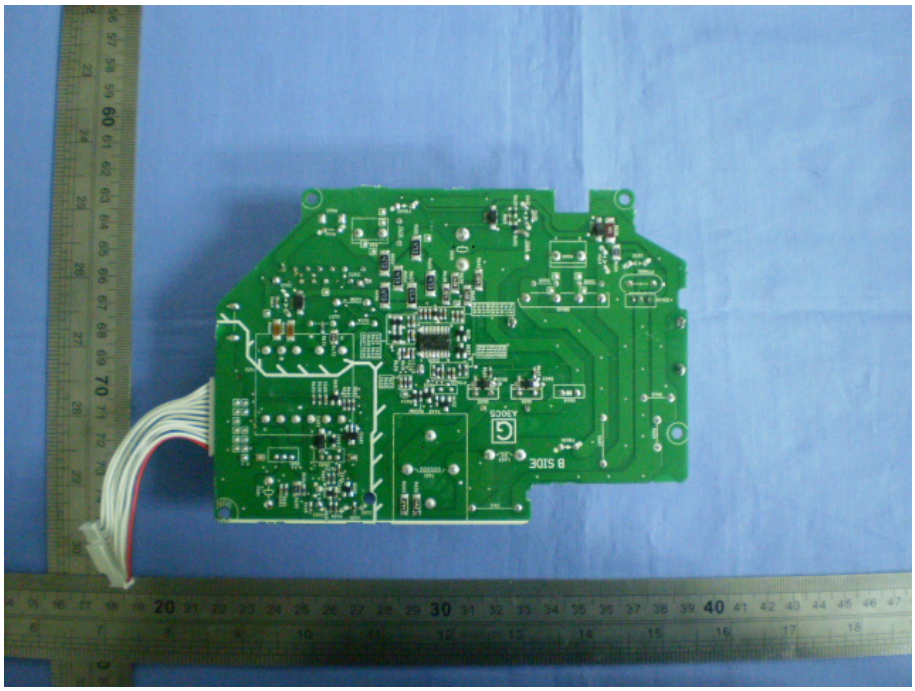
View of PCB 1-2



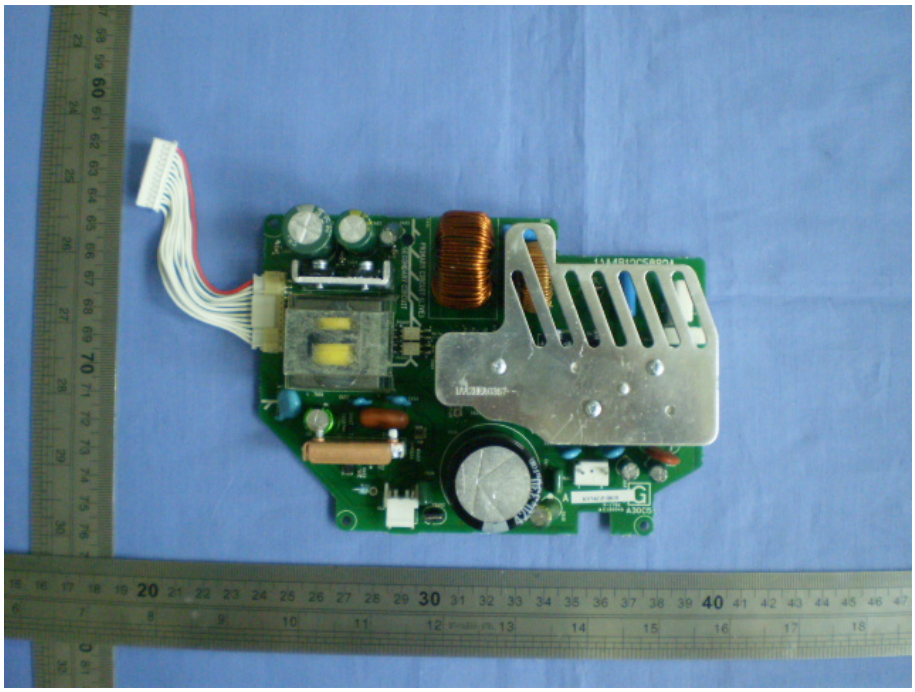
View of PCB 2-1



View of PCB 2-2



View of PCB 3-1

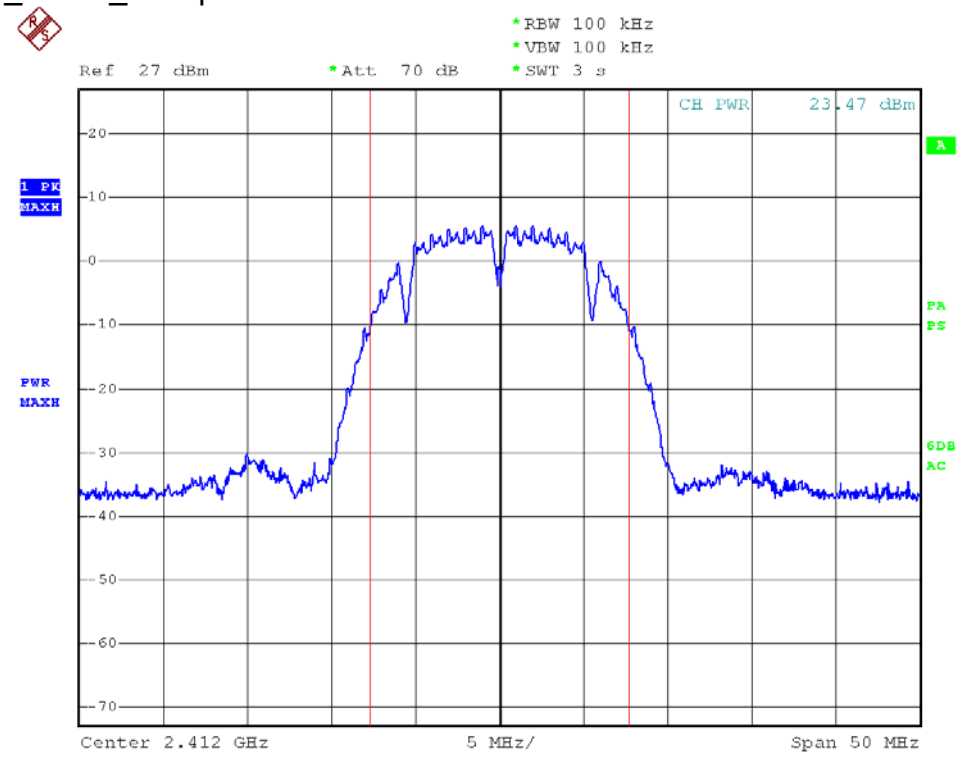


View of PCB 3-2

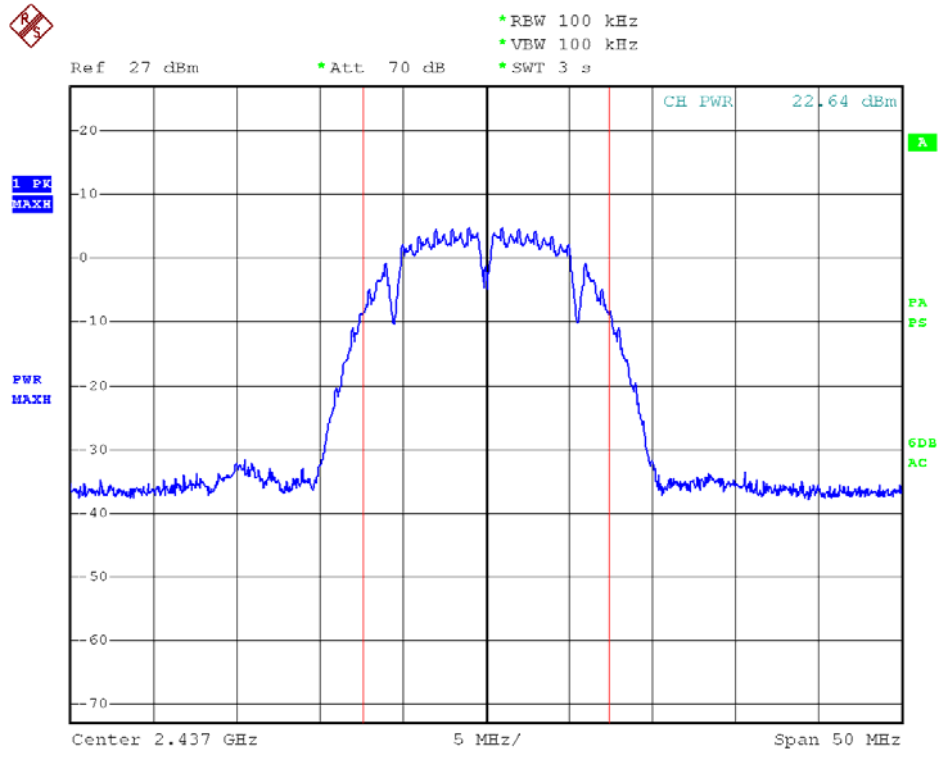
APPENDIX 4 MEASUREMENT GRAPHS

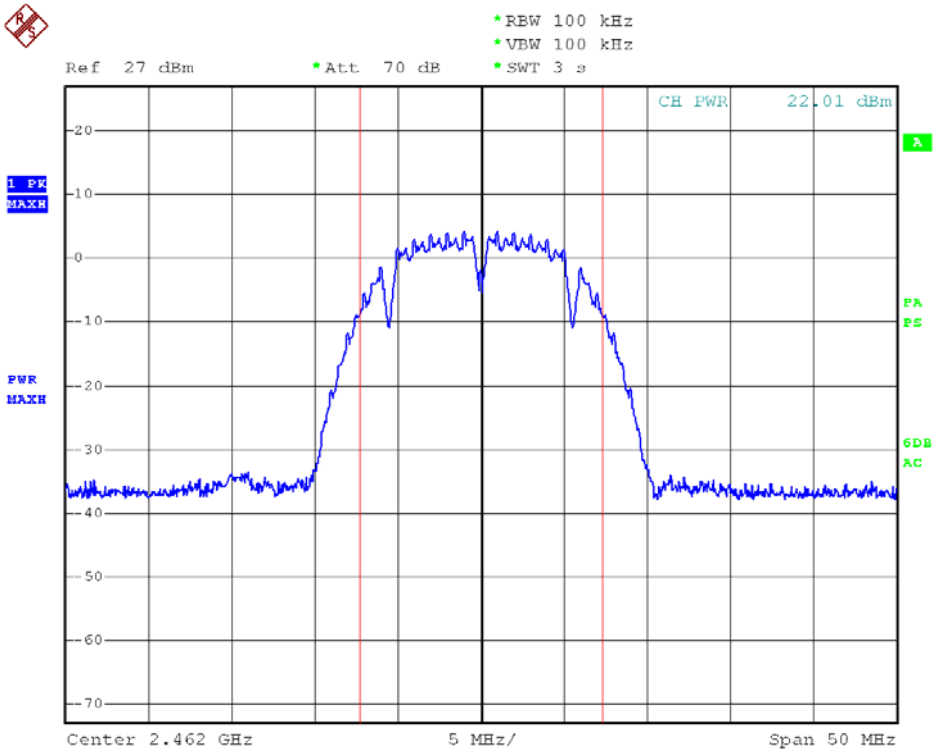
Annex 4.1 MAXIMUM PEAK OUTPUT POWER Graphs

1. 802.11b_DSSS_1 Mbps



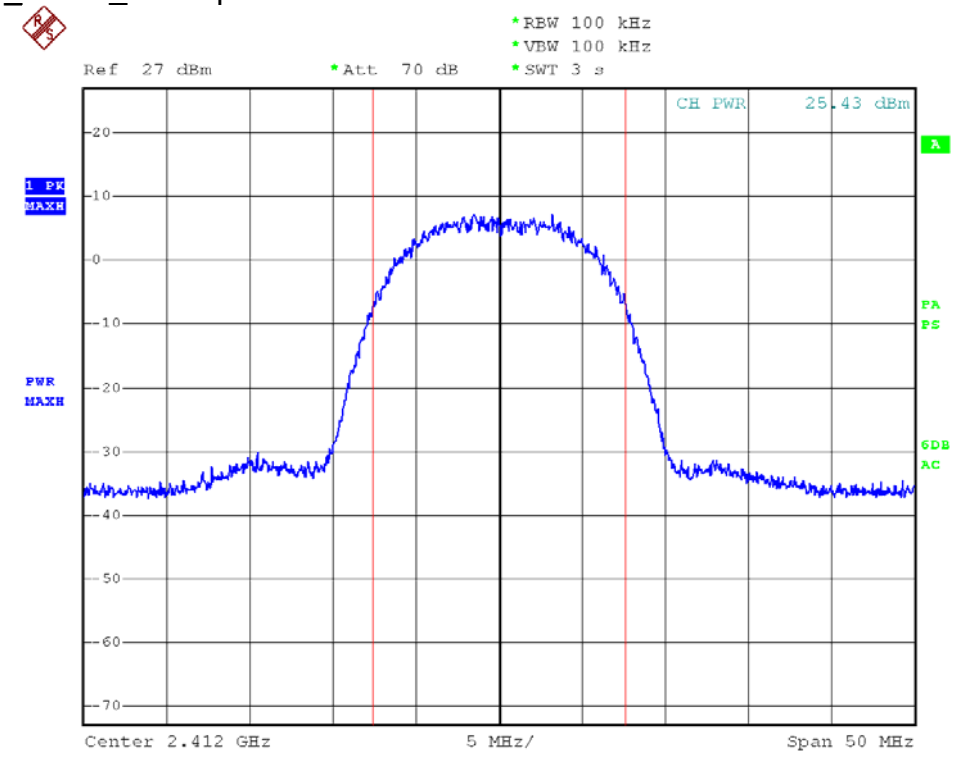
CH1: 2.412GHz



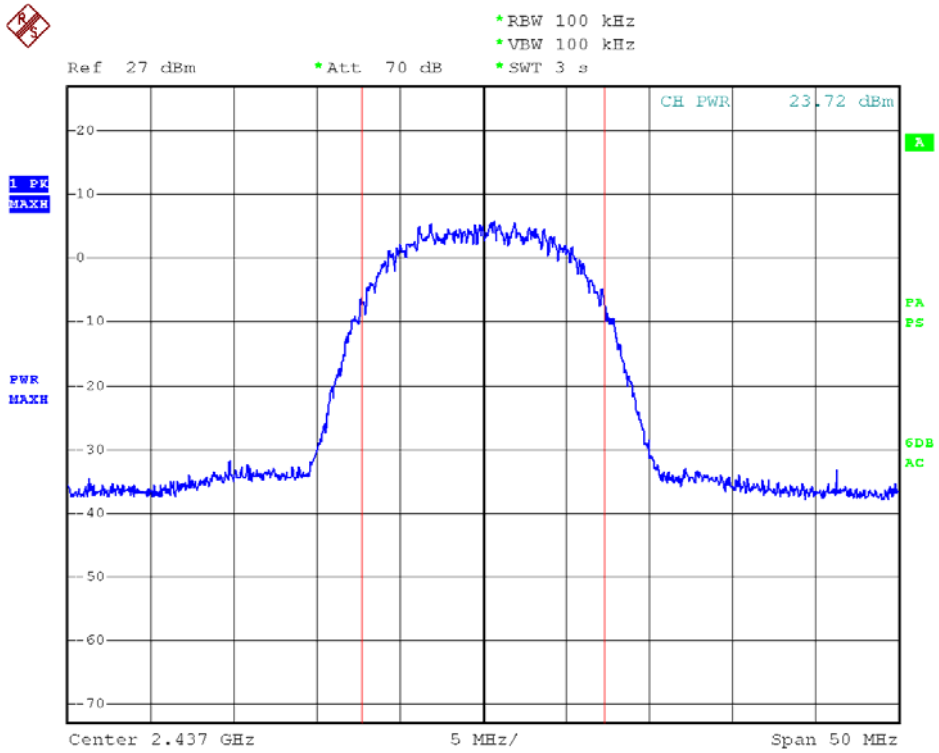


CH11: 2.462GHz

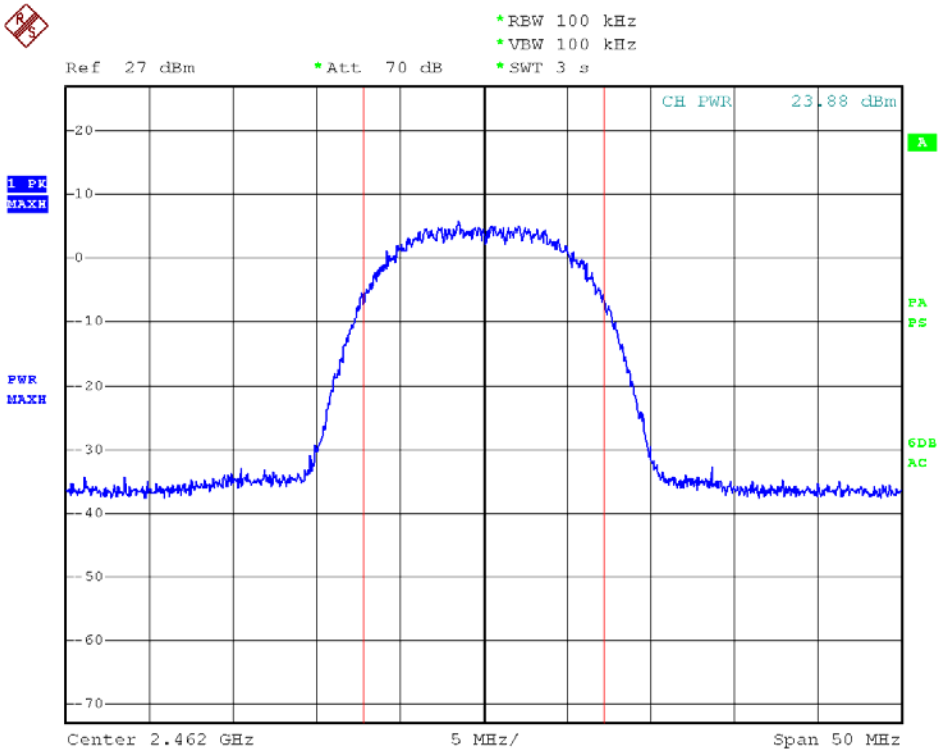
2. 802.11b_DSSS_11 Mbps



CH1: 2.412GHz

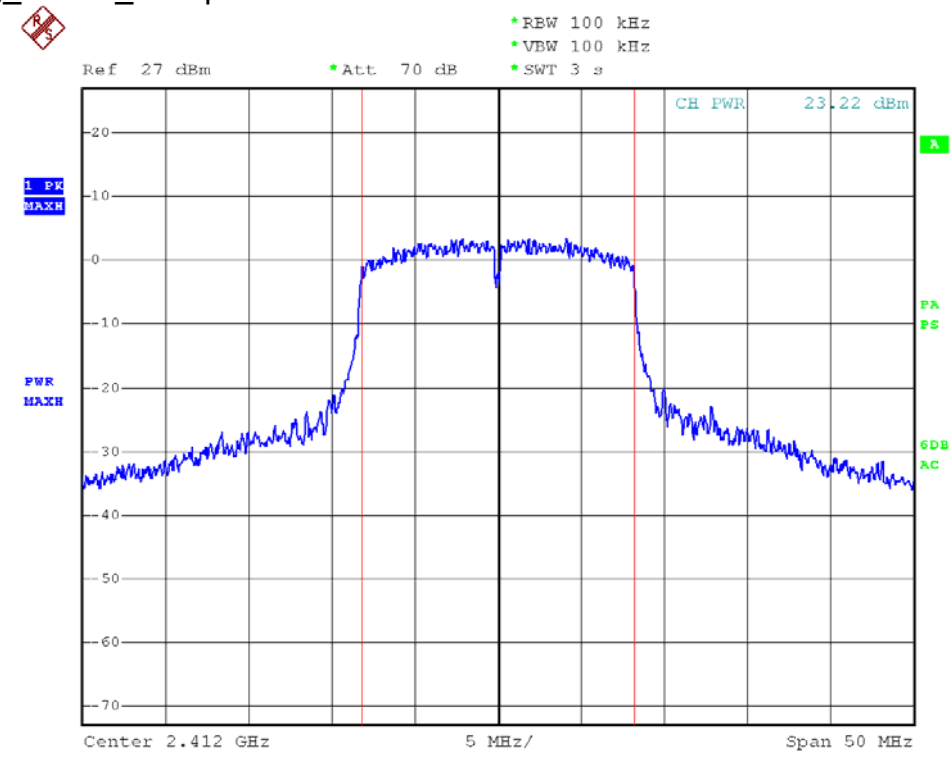


CH6: 2.437GHz

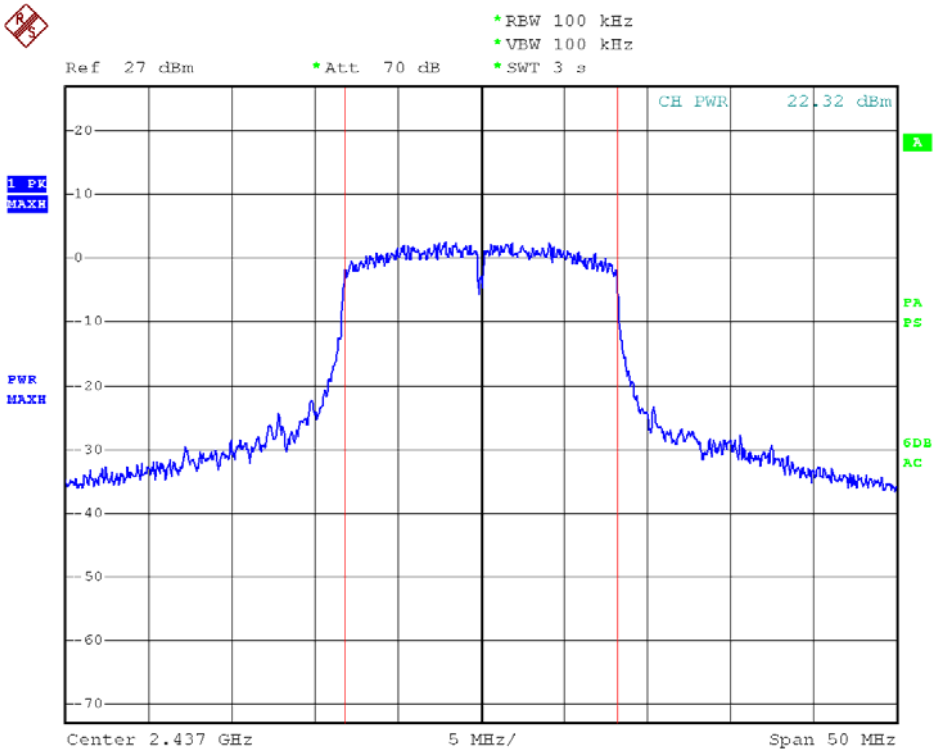


CH11: 2.462GHz

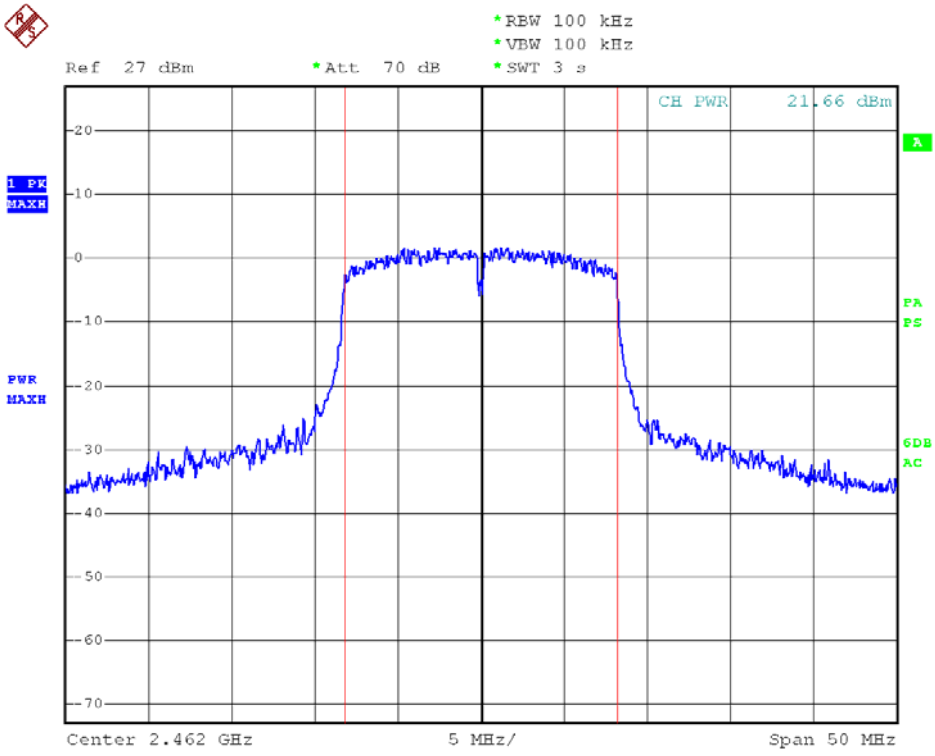
3. 802.11g_OFDM_6 Mbps



CH1: 2.412GHz

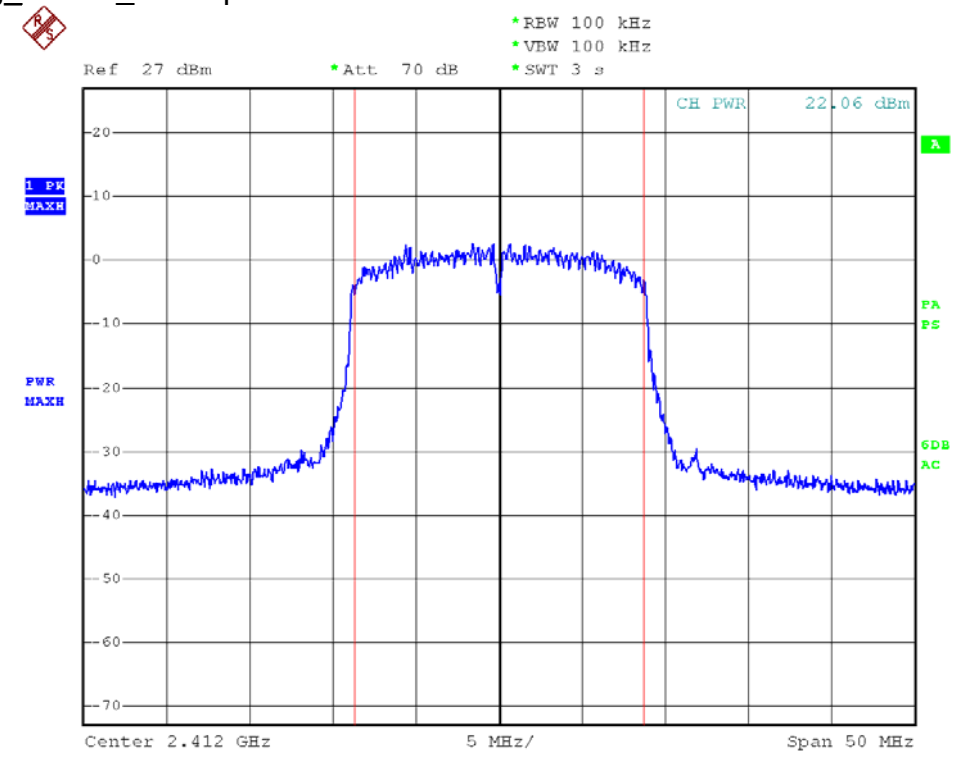


CH6: 2.437GHz

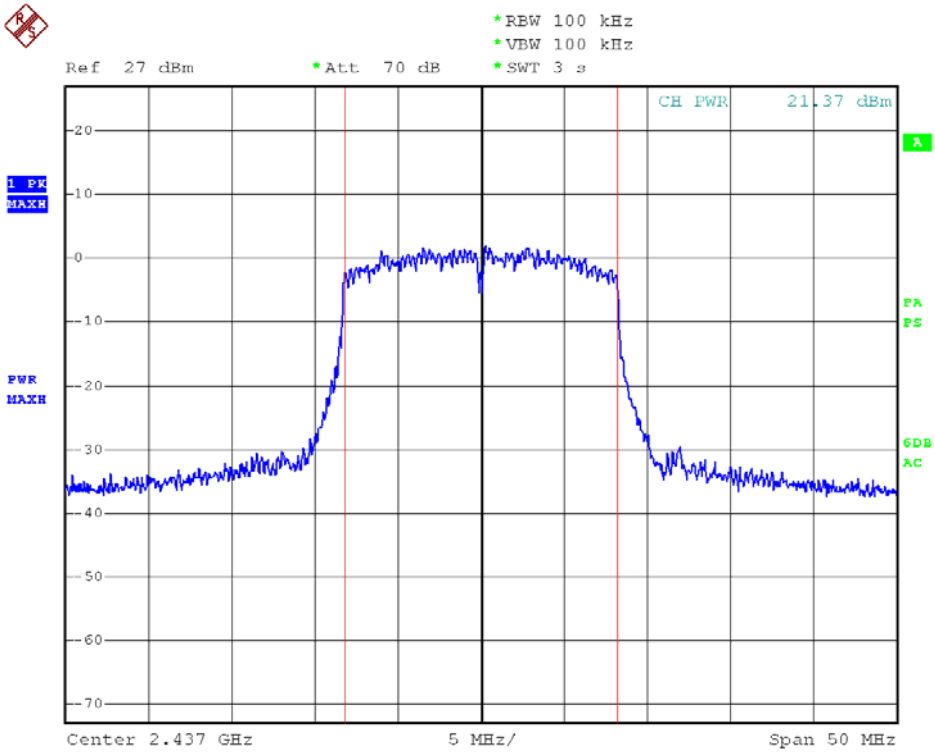


CH11: 2.462GHz

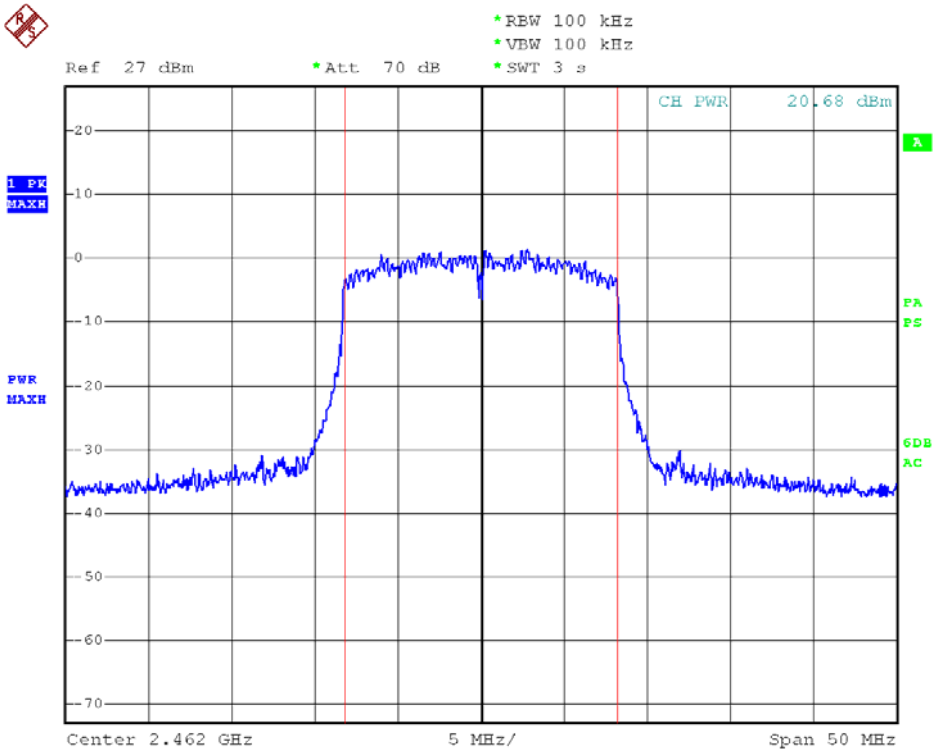
4. 802.11g_OFDM_24 Mbps



CH1: 2.412GHz

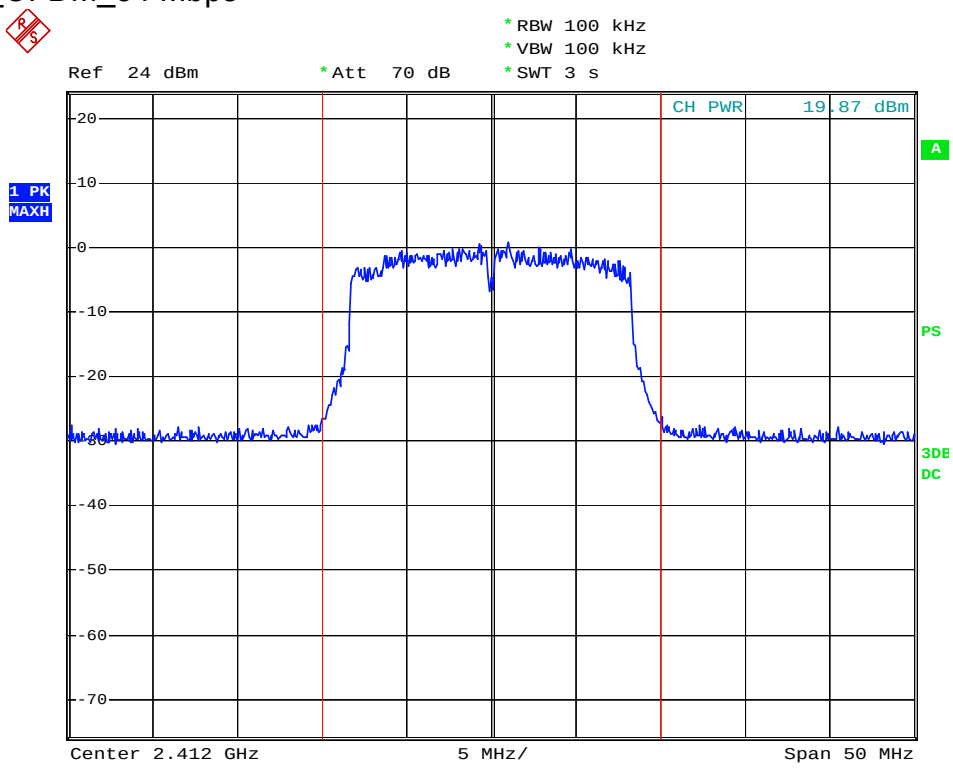


CH6: 2.437GHz

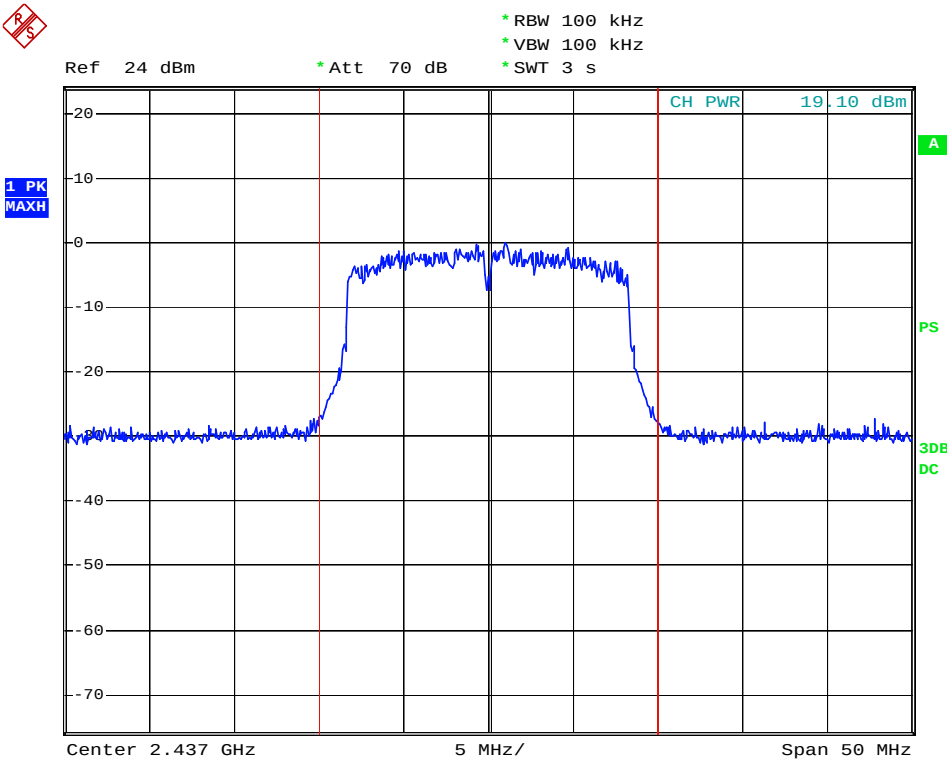


CH11: 2.462GHz

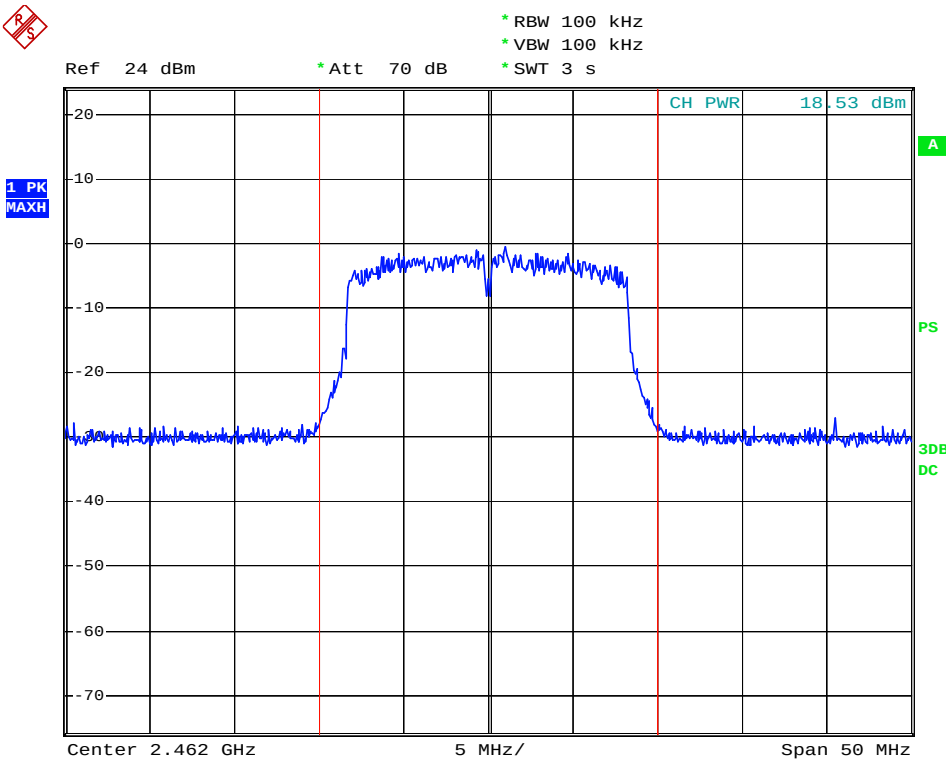
5. 802.11g_OFDM_54 Mbps



CH1: 2.412GHz

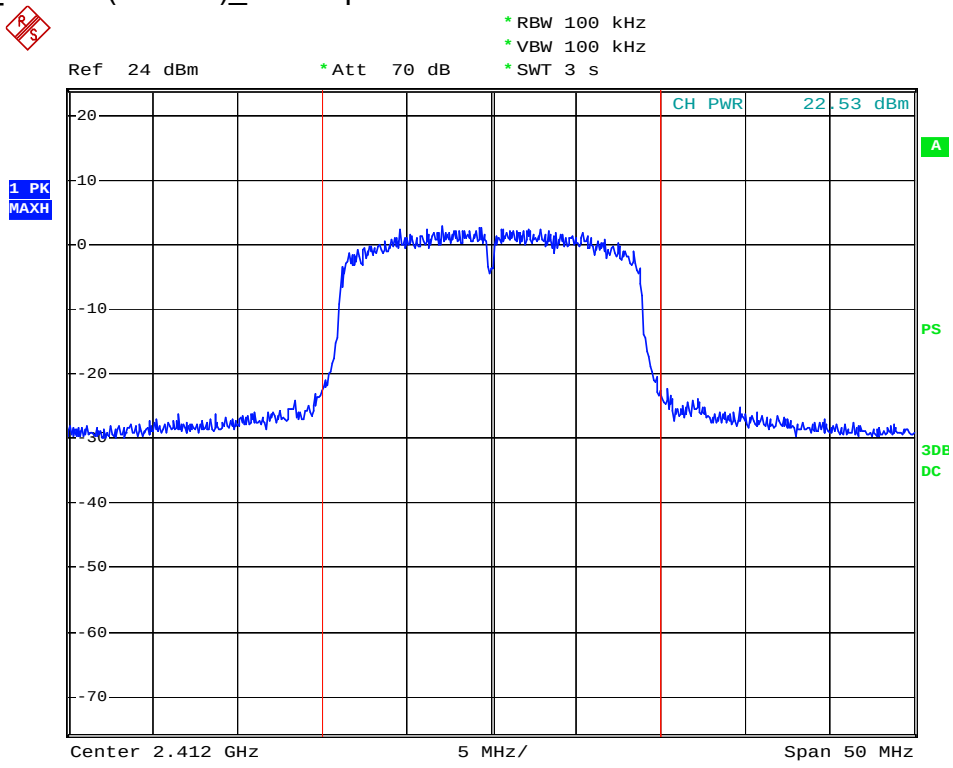


CH6: 2.437GHz

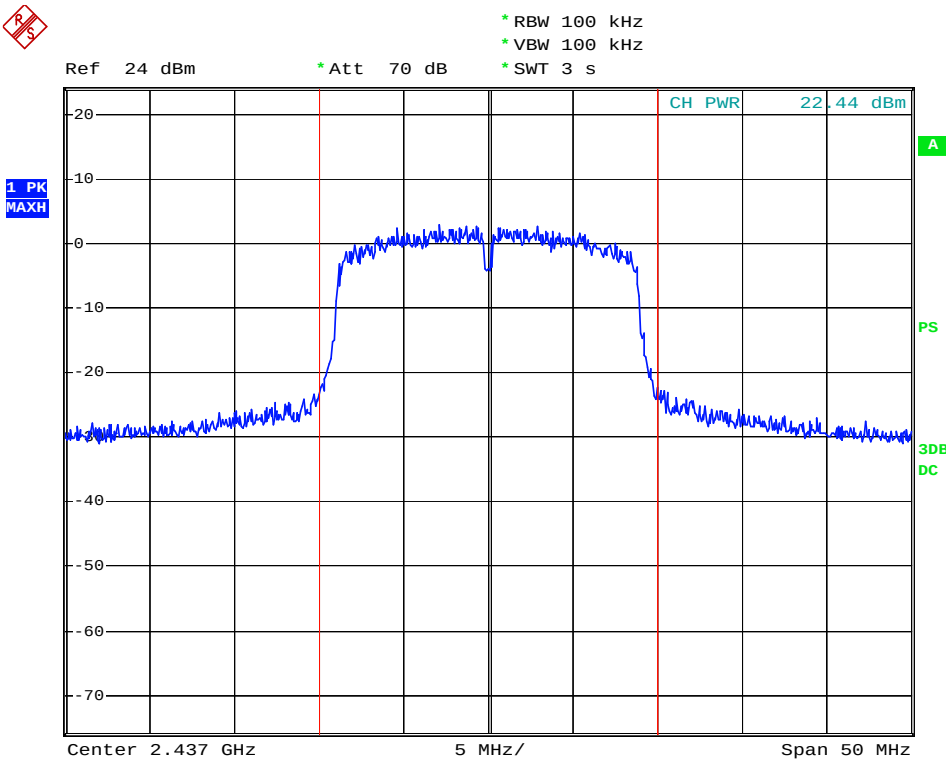


CH11: 2.462GHz

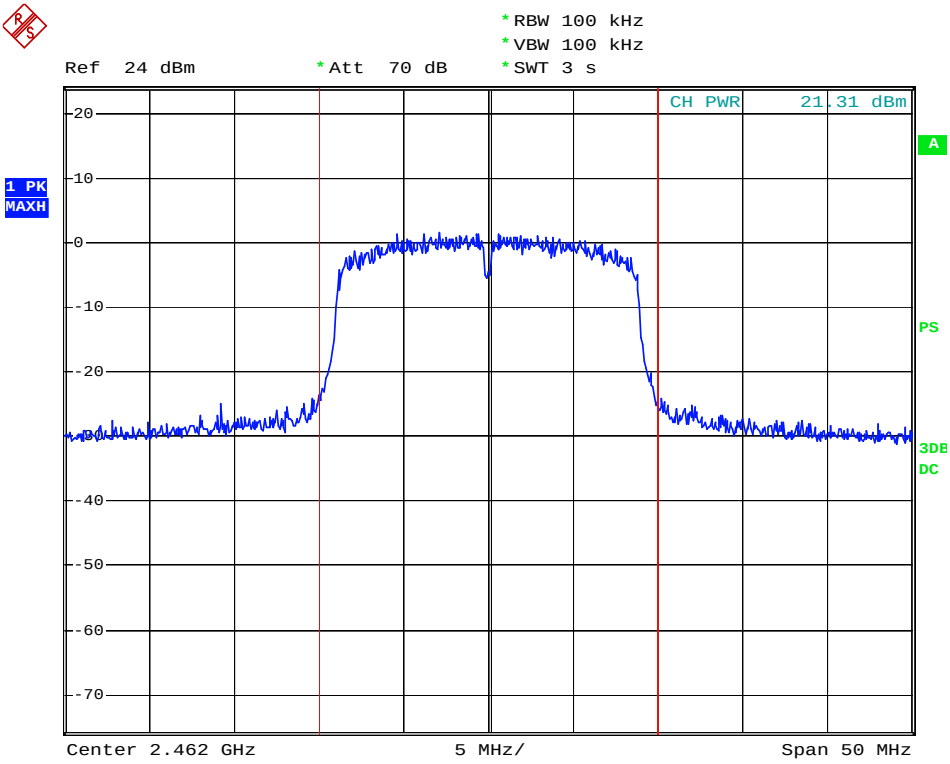
6. 802.11n_OFDM (20MHz)_6.5 Mbps



CH1: 2.412GHz

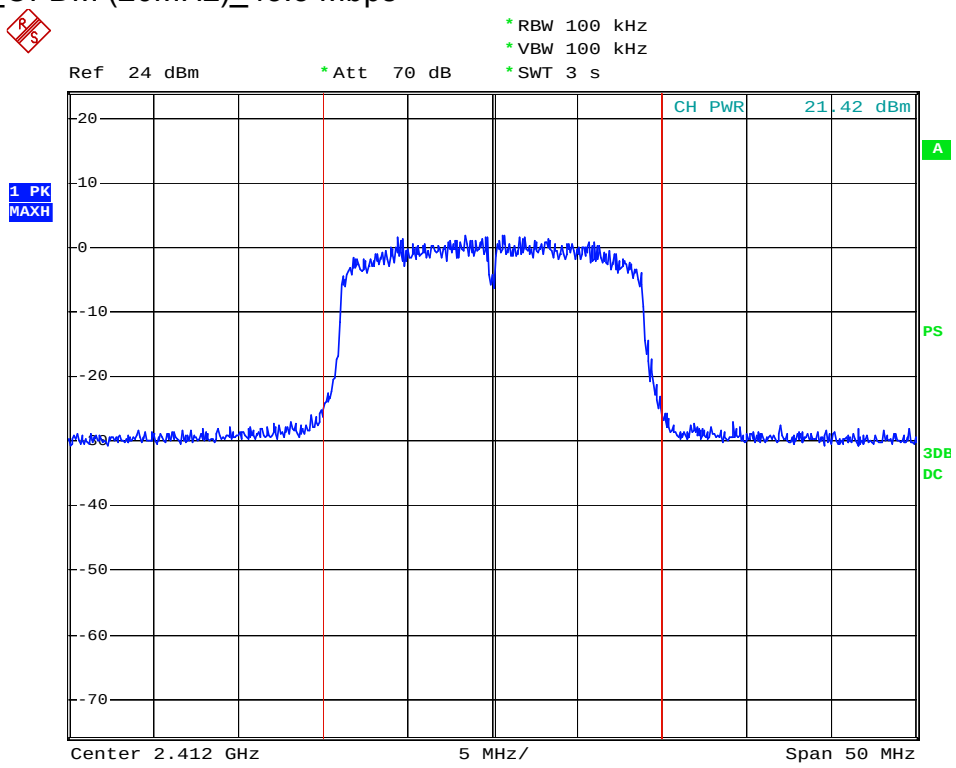


CH6: 2.437GHz

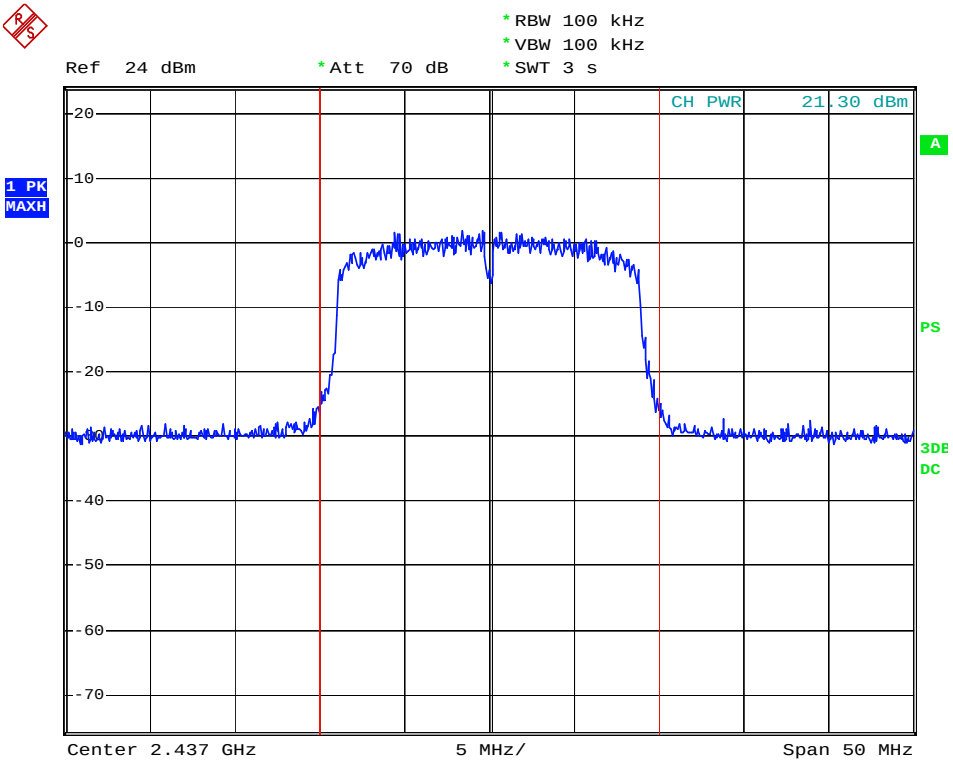


CH11: 2.462GHz

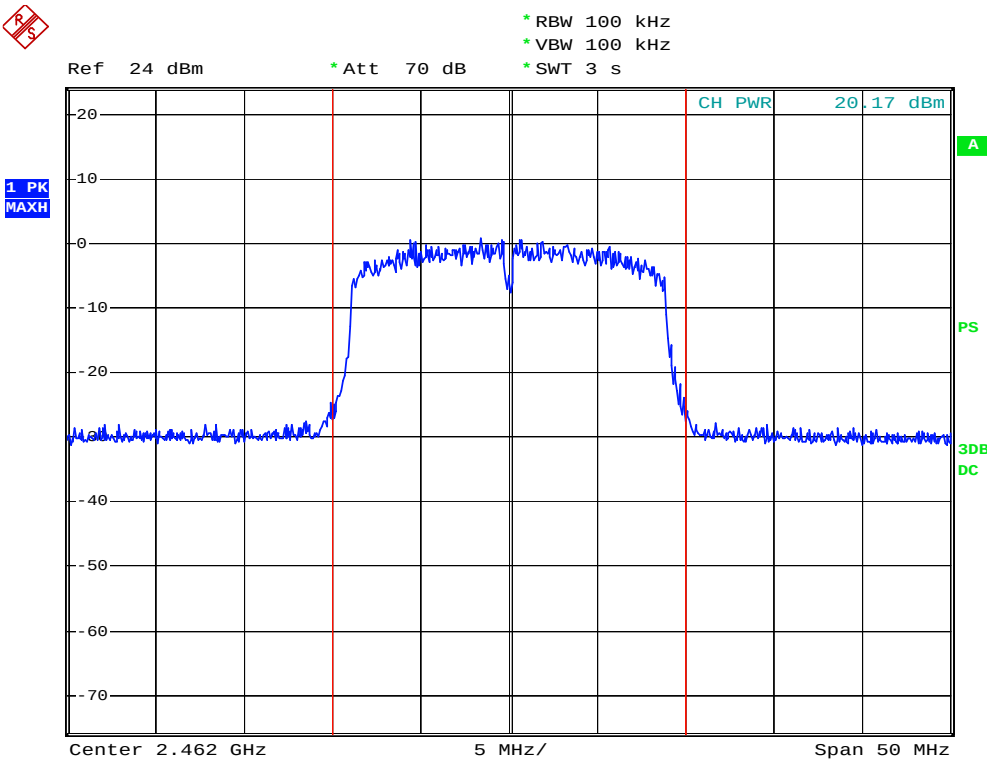
7. 802.11n_OFDM (20MHz)_43.3 Mbps



CH1: 2.412GHz

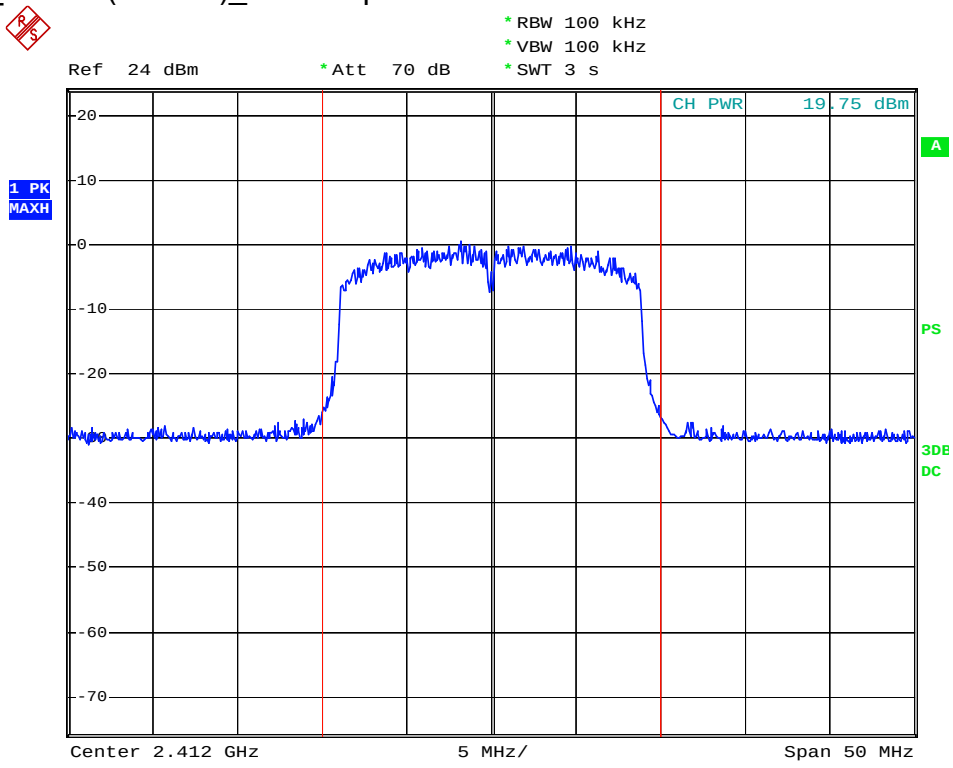


CH6: 2.437GHz

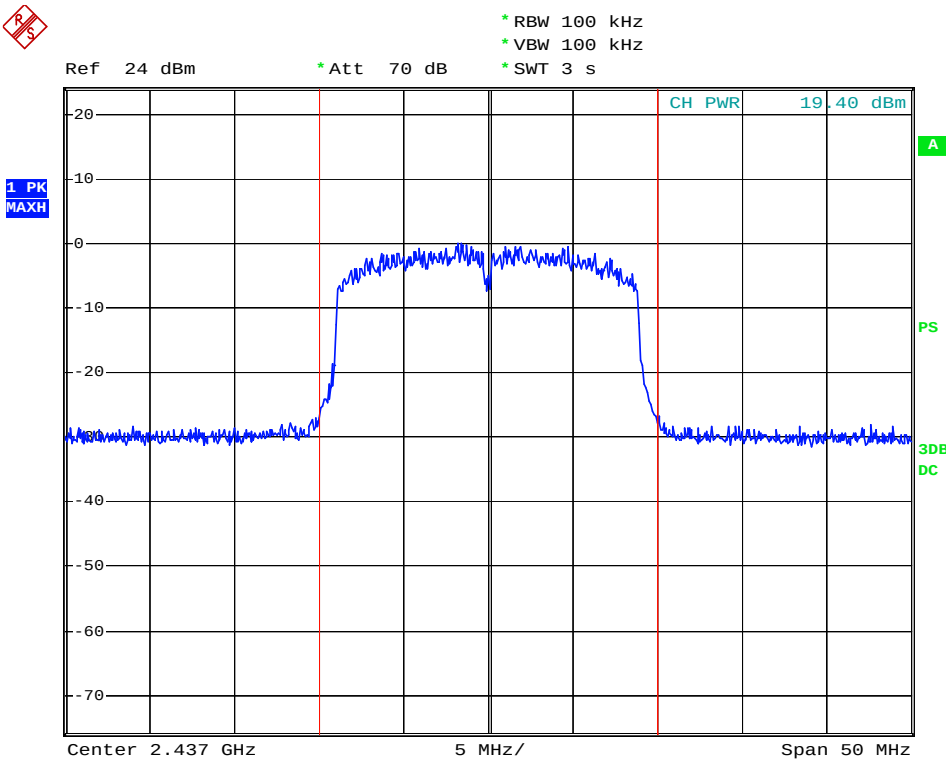


CH11: 2.462GHz

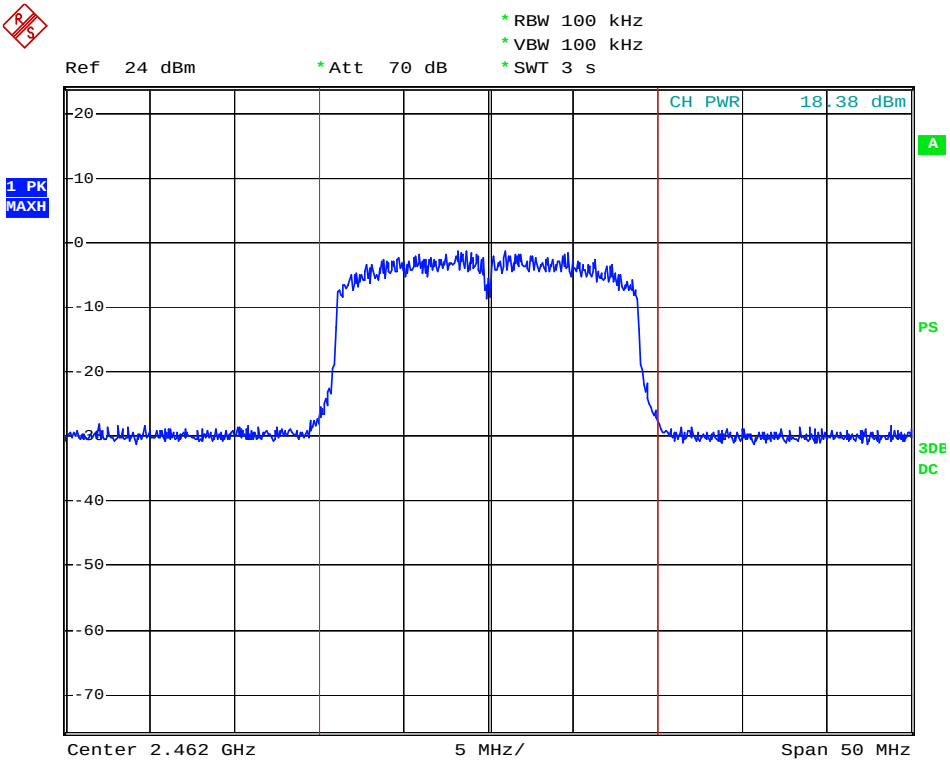
8. 802.11n_OFDM (20MHz)_72.2 Mbps



CH1: 2.412GHz

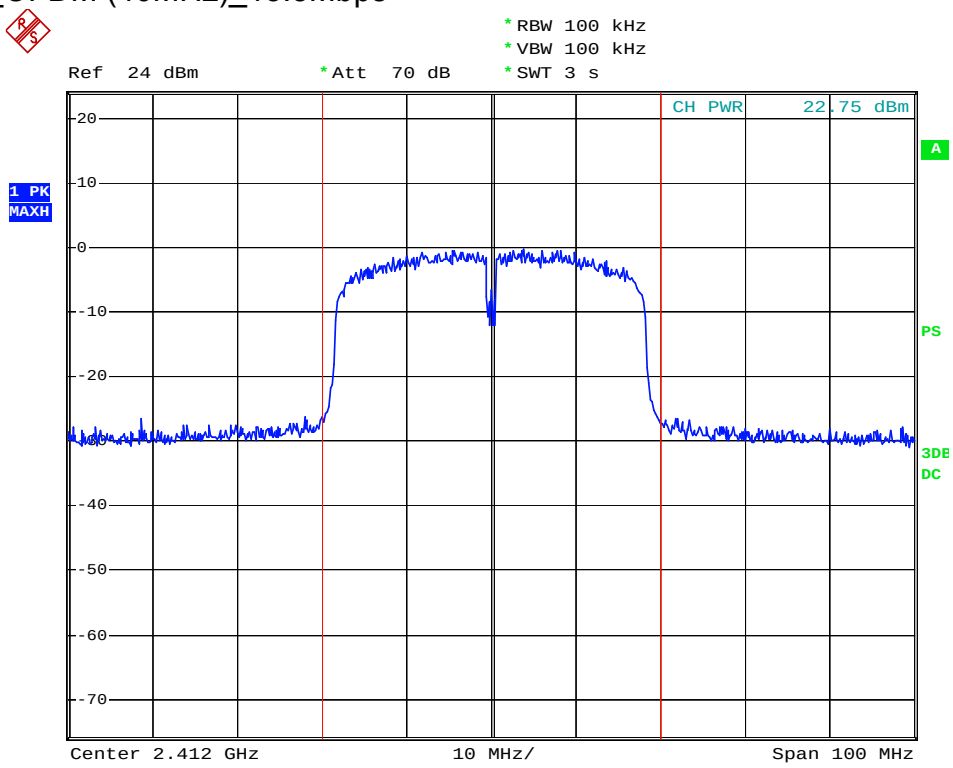


CH6: 2.437GHz

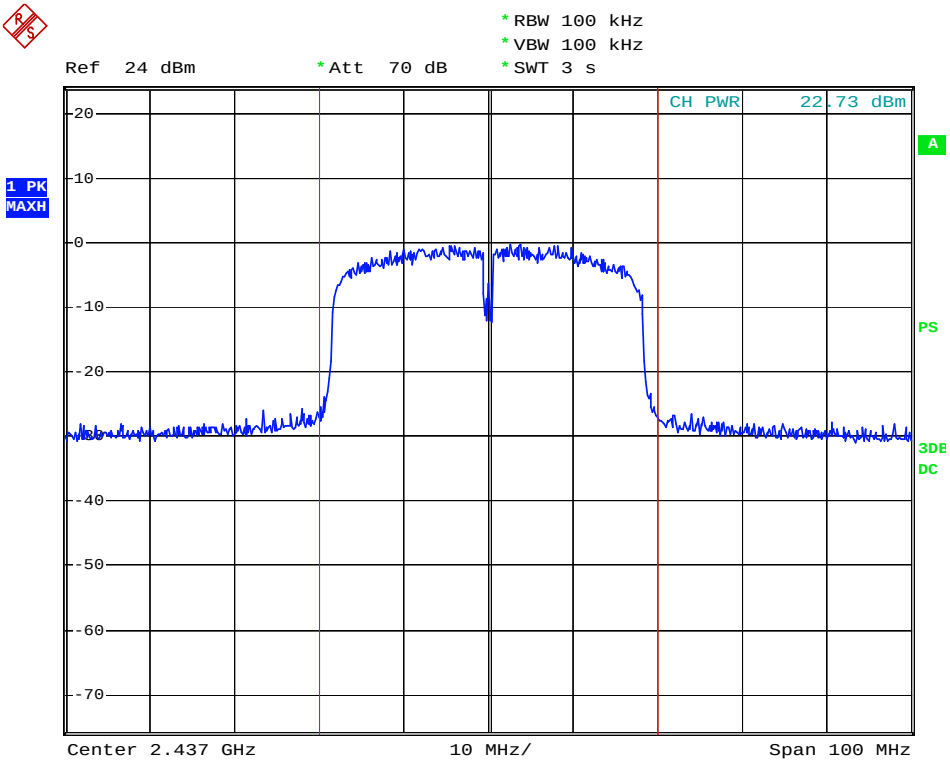


CH11: 2.462GHz

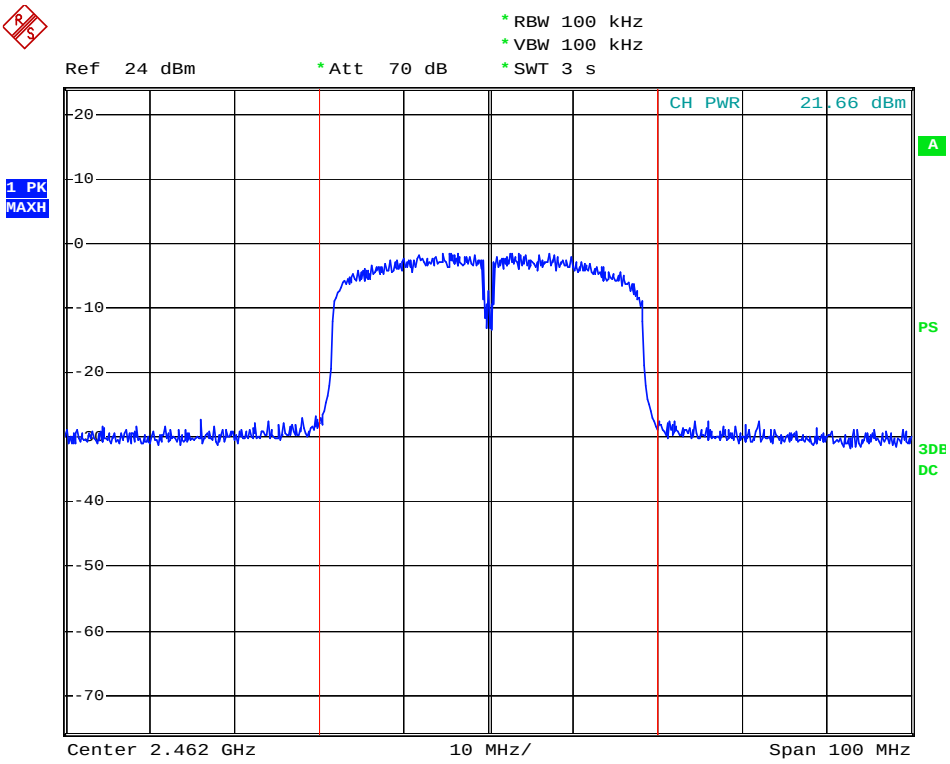
9. 802.11n_OFDM (40MHz)_13.5Mbps



CH1: 2.412GHz

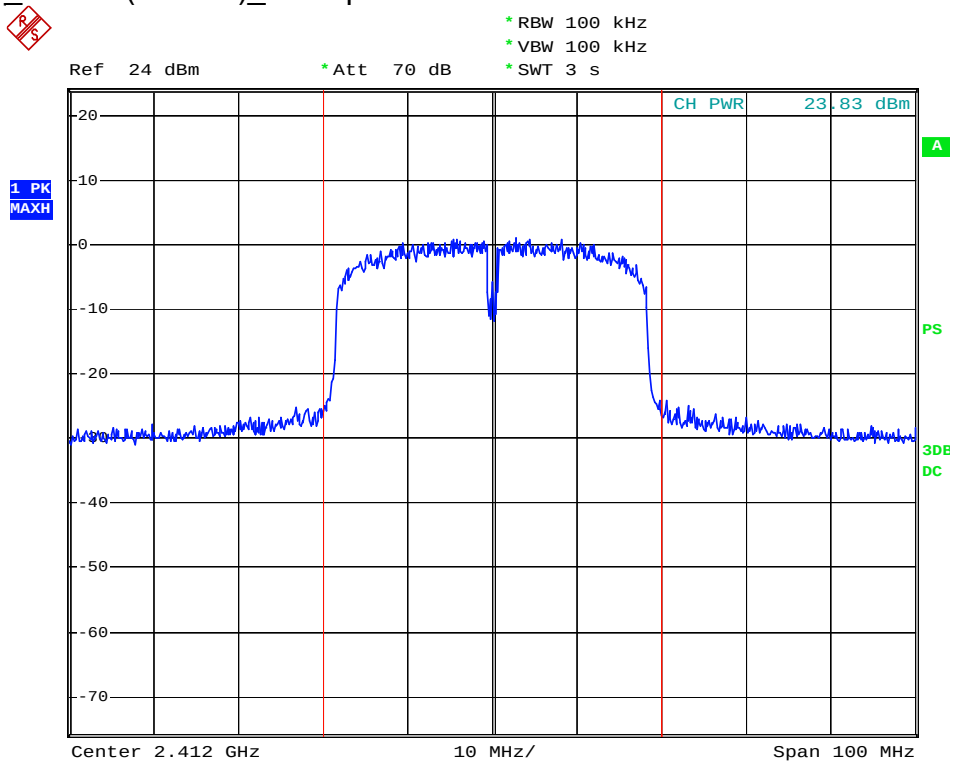


CH6: 2.437GHz

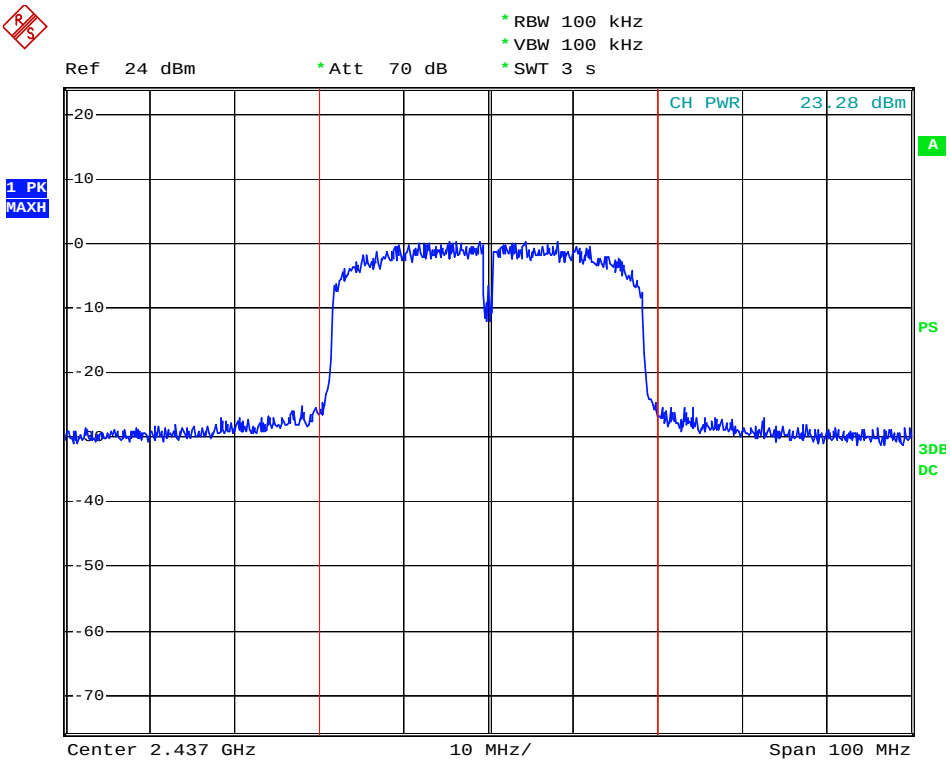


CH11: 2.462GHz

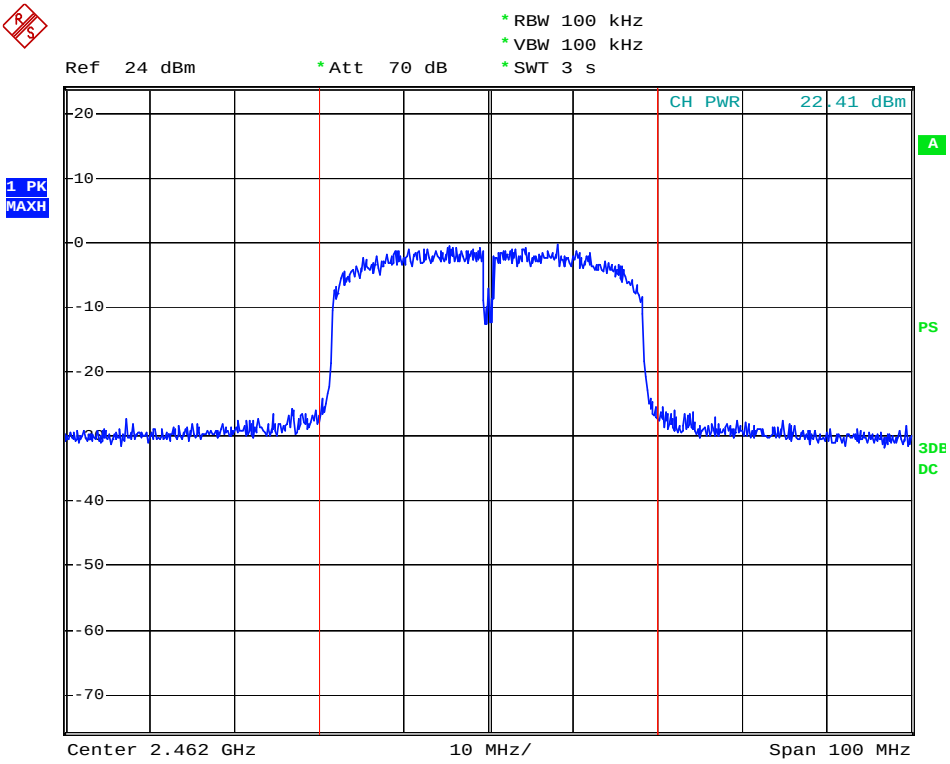
10. 802.11n_OFDM (40MHz)_60Mbps



CH1: 2.412GHz

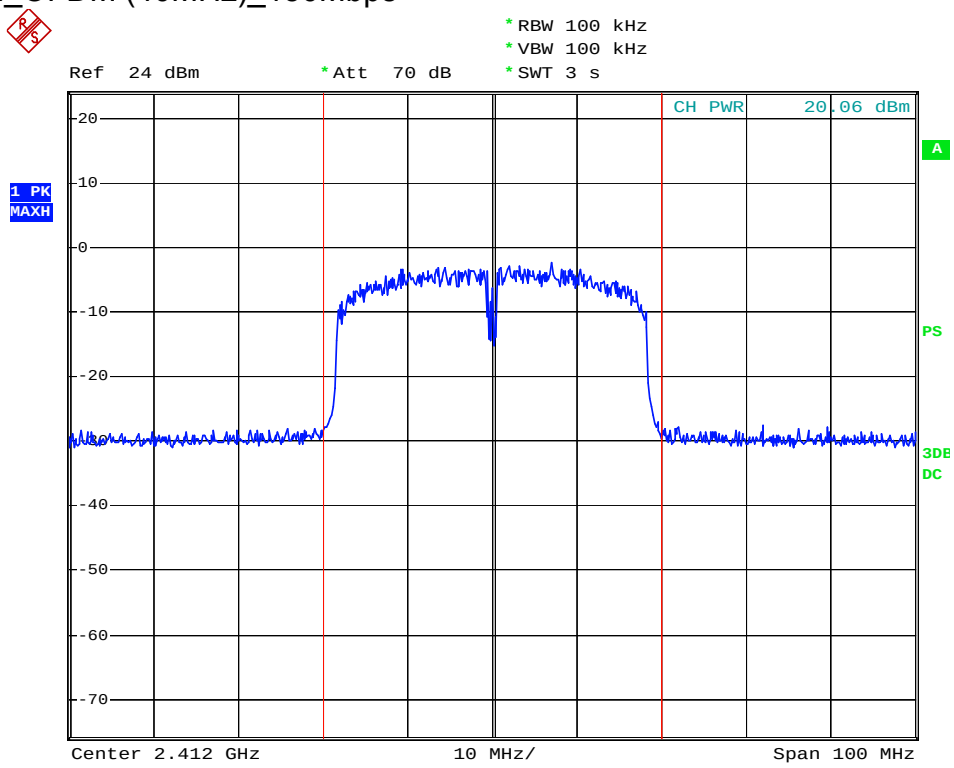


CH6: 2.437GHz

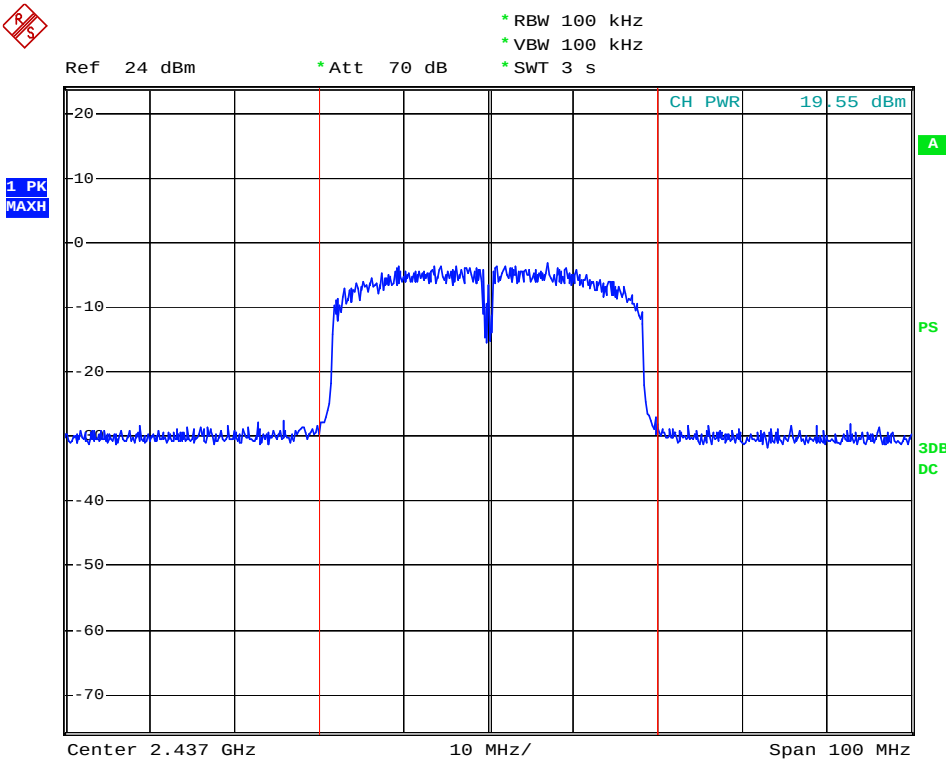


CH11: 2.462GHz

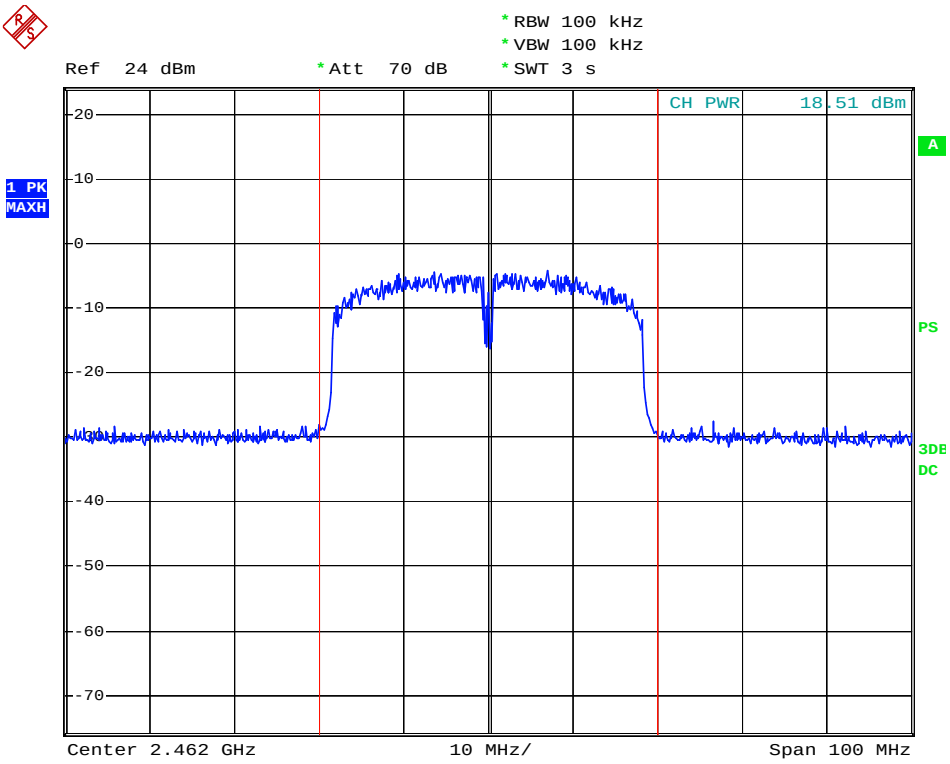
11. 802.11n_OFDM (40MHz)_150Mbps



CH1: 2.412GHz



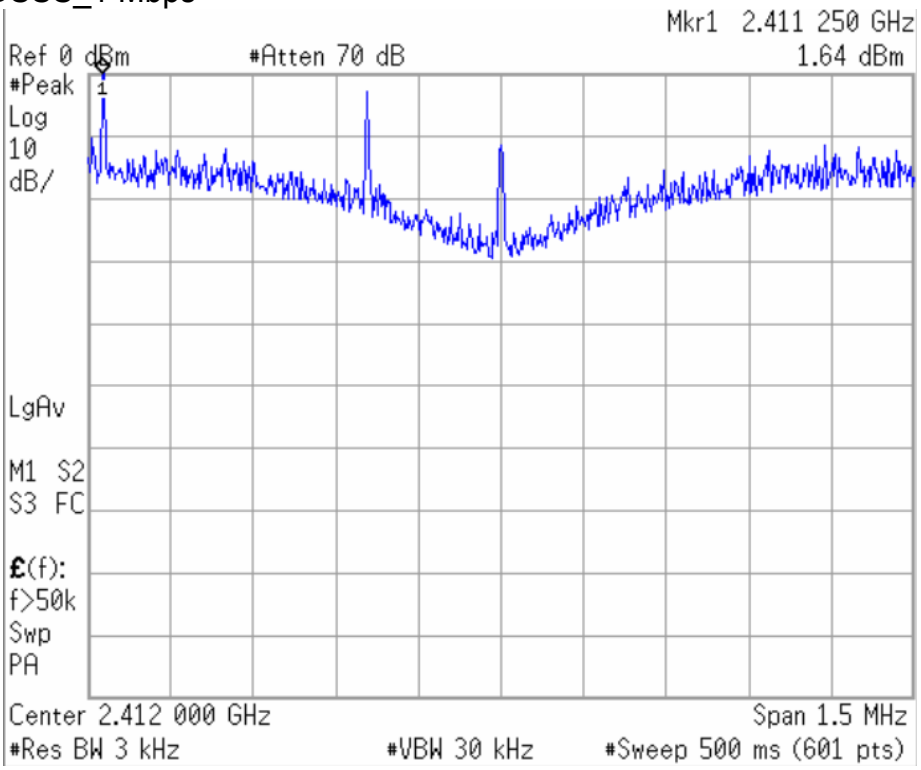
CH6: 2.437GHz



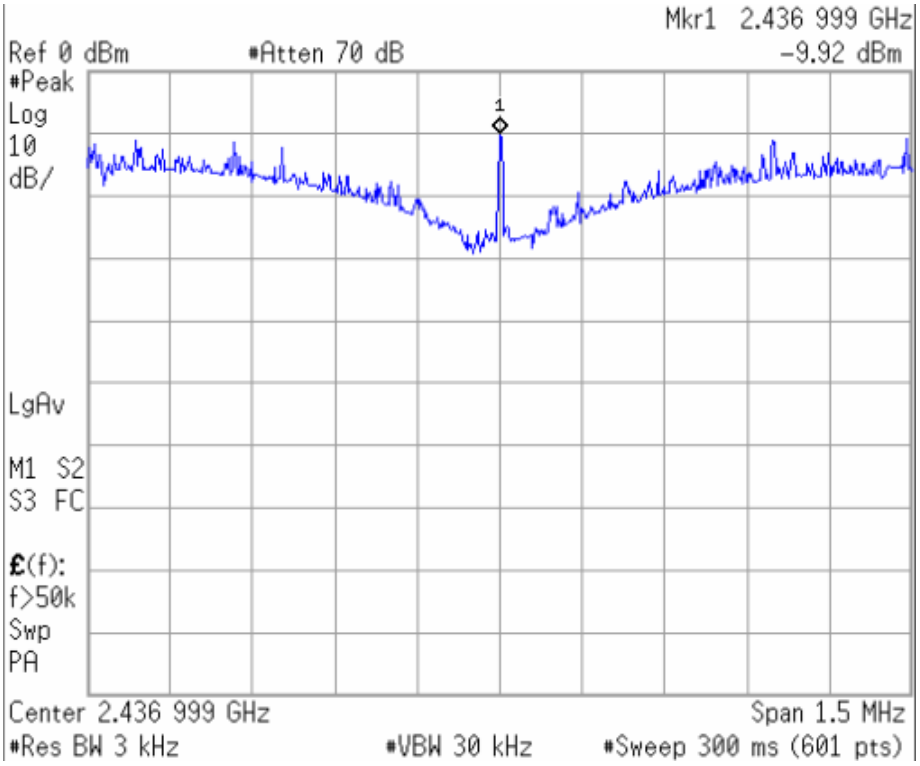
CH11: 2.462GHz

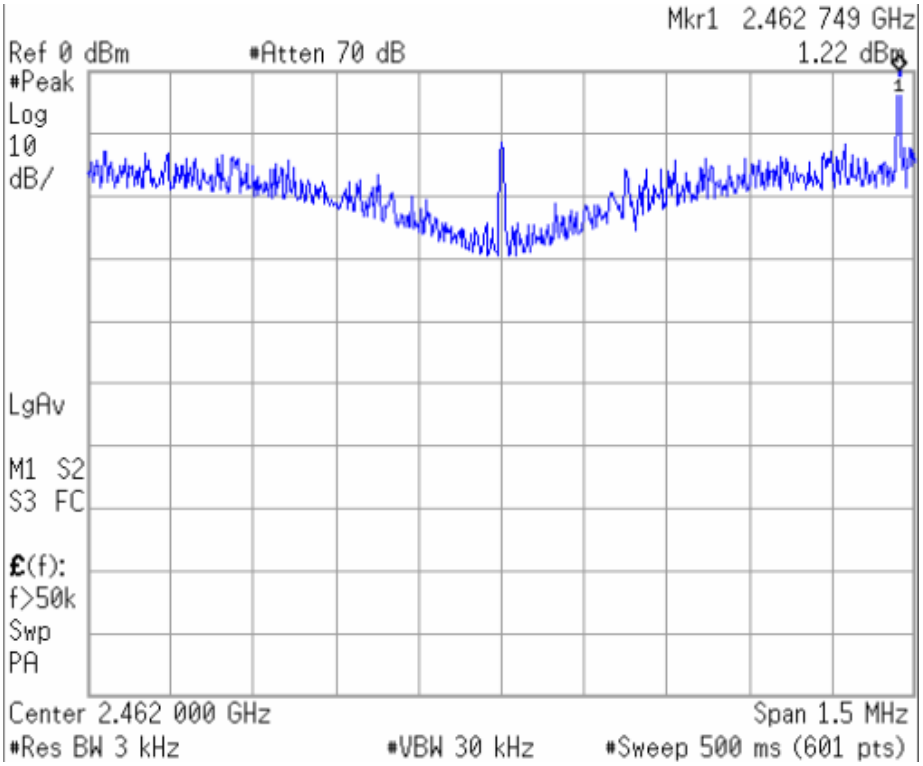
Annex 4.2 POWER SPECTRAL DENSITY (PSD) Graphs

1. 802.11b_DSSS_1 Mbps



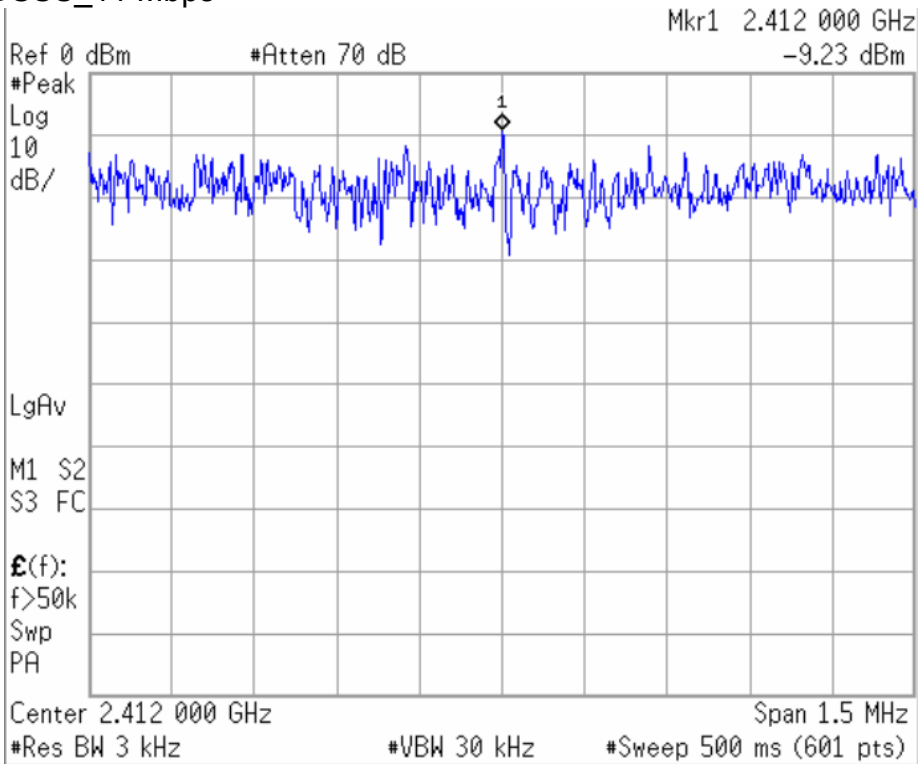
CH1: 2.412GHz





CH11: 2.462GHz

2. 802.11b_DSSS_11 Mbps



CH1: 2.412GHz